Vol.5 No.6

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CURRENT NOTES

The Newsletter For ATARI Owners

Published By

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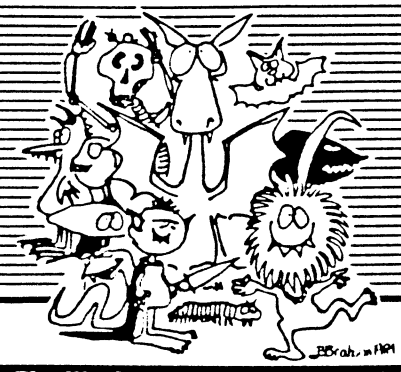
The Washington Area
Atari
Computer
Enthusiasts

Special Features

Summer CES Report
An Interview with
Jack Tramiel
Word Processing:
An Introduction
PaperClip
The Print Tool
Okidata 92

Regular Features

ACTION! Action
ATARI Scuttlebits
Battle Bytes
GameViews
Going ONLINE
New Products
Tips'N Traps
Club News



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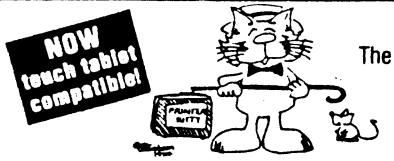

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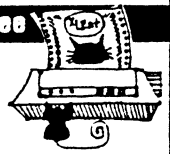

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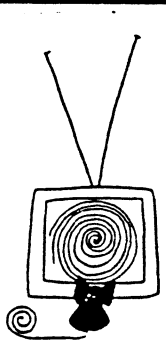

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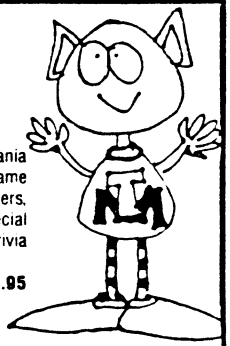
by Jan Iverson



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July, 1985

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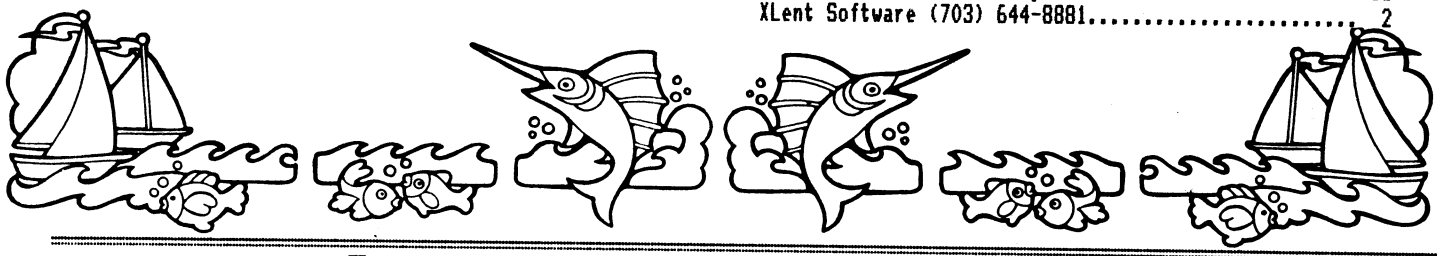

C u r r e n t N o t e s

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Current Notes is published monthly (excl. January and August) by the Washington Area Atari Computer Enthusiasts (WAACE), 8127 Heatherton Lane, #204, Vienna, Virginia 22180. WAACE is a federation of Washington area Atari User Groups (**NOVATARI, NCAUG, AURA, WACUG,** and **CPM**) which provide Current Notes as part of membership in the user group. (See inside back cover for information on joining any of the clubs.) **Direct Subscriptions** to Current Notes are also available for $15/year (send check, payable to Current Notes, to the Editor -- address below). Application to mail at second-class postage rates is pending at Vienna, VA. **POSTMASTER:** Send address changes to Editor, Current Notes, 122 N. Johnson Rd., Sterling, VA 22170.

Exchange subscriptions to Current Notes are available to other Atari User Groups. Send exchange newsletters to Jack Holtzhauer, 15817 Vista Drive, Dumfries, VA. 22026.

Material in this newsletter may be reprinted provided Current Notes and the author, if applicable, are cited.

Opinions expressed in this publication are those of the individual authors and do not necessarily represent or reflect the opinions of any of the user groups none of which are affiliated in any way with Atari Corp.

Advertising rates: full page, $70; half page, $40; quarter page, $25. Discounts available for pre-paid multiple insertions (5% off for 2 ads, 10%-3 ads, 15%-4 ads, and 20%-5 ads). Submit photo-ready copy to editor by the 15th of the preceding month. Circulation: 1,600 (Members 750, Store Sales 650, Other 200).

The Editor of Current Notes is Joe Waters, 122 N. Johnson Road, Sterling, Virginia 22170. Submissions of articles or advertising copy, subscription requests or back-issue orders should be sent to the editor. Deadline date for articles and advertisements is the 12th day of the preceeding month.

Back Issues: A limited number of back issues are available for $2.00/copy (1984: Feb, Apr, Jun, Jul, Oct, Nov; 1985: Feb, Mar, Apr, May, Jul).

Editor's Notes:

Here we are in the midst of summer. It is with a sigh of relief that I send this issue to the printer. I, and I suspect, most of our columnists are looking forward to the one-month summer "vacation" from Current Notes. As you know, there is no issue in August. Your next issue of Current Notes will appear at the beginning of September.

But don't despair. We've got another jam-packed 40-page issue to get you through the summer. Chris Amori of ACA was at the summer CES and brings us his observations on the show and Atari's presence there. Another person there was Jack Tramiel. I think you'll find the interview he granted to Jeff Williams quite interesting (did you know you will be able to upgrade your ST to a 32-bit machine?, purchase a 260XE?, get a 1-meg drive for your XE?). But Bob Kelly has the best new of the day. He'll tell you all about Current Notes gold award from InfoWorld as one of the best user group newsletters in the country. (I've also taken Bob's advice to heart and am doubling the salary of all columnists.)

Looking ahead to the fall, we are starting our in-depth review of word processors. I have written an introduction to the subject and provided a review of **PaperClip**. John Barnes reviews **The Print Tool**, a word processor written by the Marshall Abrams, the president of AURA. Roland Gabeler has submitted our first printer review for the **Okidata 92**. In September you can look forward to reviews of **Writer's Tool** from OSS, **Letter Perfect**, and **AtariWriter Plus**.

You'll find a couple other reviews in our regular columns. Evan Brooks analyzes **Napoleon at Waterloo** and Roland Gabeler examines the **Realm of Impossibility**. Ed Seward takes a look at modems and gives a tutorial on how to download. Want to use the extra memory in your XL? Look at Jon Smith's ACTION! column to see how. And, of course, you adventurers can get some more hints out of Tips'N Traps.

As I am writing this, the STs from our group order have not yet arrived. As you are reading this, I expect to be reading the new ST manuals. (What was that about a vacation?) Look forward, therefore, to first hand reports on the new ST's. Other new products are also arriving and will be reviewed soon including kyan **PASCAL** (works very nice with the XE ramdisk), SSI's **Computer Quarterback**, **Six Gun Shootout**, and **Gemstone Warrier**, BI's **80-column cartridge**, XLENT's new **Typesetter** and OSS's **BASIC XE**. Atari owners, you're a lucky lot. You are going to be treated to some great new products in the coming months! For next year, developments like the new CD ROMS, promise to be even greater yet. And best of all, following Atari's lead, everything is going to be inexpensive. Enjoy your summer!

jw

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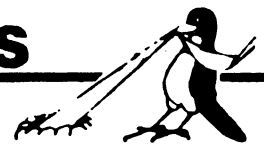

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CES REVIEW

by Chris A. Amori, ACA Inc.

The Summer Consumer Electronics Show in Chicago lacked much of the fanfare and pizzazz that the Winter CES held in Las Vegas had, but the underlying message to the home computer industry was still the same... ATARI IS HERE TO STAY!! Although Atari didn't have the 70' by 90' booth they had at Winter CES, for someone who almost didn't come, they did all right.

As most of you probably know, Atari originally decided to skip the Summer CES. The press had a field day with this announcement and proceeded to rant and rave that the end of Atari was near!!! (we've never heard that before, have we??!!) The simple fact of the matter is that attending a show of this size is VERY EXPENSIVE, and we all know Atari doesn't have money to burn. Coupled with the fact that they really had no major new products to demonstrate to the retailer, it made perfect sense not to spend $250K-$500K on a show, when the money could have been better spent elsewhere (like getting the ST's into full production!!). The only problem was that the CES people, knowing the kind of publicity Atari created from the Winter CES, basically "made it very attractive" for them to be there. My guess is that they gave them the space.

Atari was crammed into a meeting room no larger than about 600 sq. feet on the Mezzanine level, coincidentally (or maybe not?!) overlooking the Commodore booth. The entire time I was at the Atari booth, it was packed!!! They had to move the receptionist out into the aisle to be able to fit more people in. In my opinion, Atari stole the home computer show again!

New Products From ATARI. By far the most innovative computer technology shown at the show was the active demonstration of CD ROM in the Atari booth. What is CD ROM, you ask? I did, to be honest with you; I had also never heard of this, until I stepped into the ATARI booth. By now you should be familiar with CD (compact disc) players. The are becoming very popular as play-back devices for music. CD ROM is essentially the same idea, except it is used to store information (data) instead of music. At this point it is referred to as ROM (Read Only Memory) because there is no way to save information on the disc, you may only read from it. One CD ROM disk holds 100 MegaBytes of data (this is equivelent to 10 IBM PC-XT's or about 1,136 Atari single density disks). WOW!!!!!!!!

The company that puts the information on these disks placed an entire encyclopedia on a CD ROM. Then they wrote software on the ATARI 520ST to retrieve information from the encyclopedia, by simply using keywords. In the demonstration I watched, the computer was asked to find all references to "King,James,England", not necessarily occurring one after another, but in the same paragraph. The return key was pressed, and in about 10 to 15 SECONDS the computer came back and said it had found 5 references to these words; it then immediately started showing the first topic and article it found. Now before you throw out your Encyclopedia Brittanica and order a CD ROM, you must know that at the present pricing this little baby will set you back about $2,700 and I'm not sure that included the disk itself!! The software manufacturer stated that it is their intention to get the price of the player (ROM) down into the $500 range, also stating that ATARI has made a firm commitment to developing this new technology.

Several other new products were shown at the Atari booth. One of the interesting introductions was the 260ST and the 260STD. The 260ST is a 256K version of the ST series that was brought out to satisfy the needs of the mass merchandiser, although computer specialty stores should also be able to sell them. The 260STD has a built-in 3 1/2" 500K disk drive. The STD model should be the best deal, because the disk drive is built in, it should be slightly cheaper than a 260ST and a drive seperately. The only disadvantage I can see is that the 260ST's will not be expandable to 512K (at least not by Atari). Therefore the user will be limited in the amount of actual RAM left for programming or may find some programs written for the 520ST may require more than 256K of memory.

The last item I will mention from Atari is their new XM301 modem. The XM301 is a 300 baud modem, which comes with software on disk that supports uploading and downloading with X-modem protocol. It hooks up directly to the back of the disk drive or computer and does not require a power supply. Audio is routed thru the monitor (or TV) speaker, so you have some idea what is happining on the other end. The most incredible thing about this modem is the price... a mere $49.95!! Delivery is expected in July.

Atari wasn't the only company with something new to see at CES. Batteries Included finally unveiled their 80 column board for the Atari 800XL and 130XE 8-bit computers. The board is actually a cartridge that plugs into the regular cartridge slot on the top or back of the 800XL and 130XE respectively. The BI-80 should be used with a good quality monochrome monitor for best effect. At the show, BI had a green monitor hooked up to a 130XE running PaperClip in 80 columns. The end product was as good or better than the $249.00 Bit-3 board for the 800. The price, you ask? Not $250, not even $150, the BI-80 board is expected to sell for only $79.95! This will be HOTTTTTTTT!! On the down side, all you faithful 400/800 owners out there better run out and buy a 800XL or 130XE. The BI-80, although it runs in the cartridge slot, will NOT run on the 400/800 computers. BI said it would have cost about $20 more per unit to make it compatible with the 400/800, and they felt that extra $20 would inhibit the sales of the product, so they chose not to make it compatible.

ATARI 520ST. It has often been said that "good things take time", and Atari is no exception. The 520ST, after six months of a lot of talk and no action, should be shipping July 8. The 520ST will come packaged with a 500K (360K formatted) 3 1/2" drive, and a black on white monitor. This package will sell for $795. Additional drives and monitors should be available shortly after the ST's are shipped.

ATARI SCUTTLEBITS

by Bob Kelly

Current Notes No. 1! In case you missed the news, John Dvorak of InfoWorld has selected **Current Notes** as one of the top 6 Computer User Group newsletters in the United States. Over 300 newsletters were evaluated on the basis of "looks, personality, honesty, and value." The six gold medal winners were:

1. **Current Notes**: General Category - ATARI ($1.20/issue - monthly).
2. **BMUG**: General Category - MacIntosh ($15/issue - 3 times/year).
3. **Blue Notes**: General Category - IBM ($2.50/issue - monthly).
4. **Apple Library Users Group**: Corporate Category Published by Apple Computer (Free to libraries).
5. **CPA Micro Report**: Commercial Category For professional spreadsheet users ($147/year).
6. **Foghorn**: General Category - Osborne ($24/year, Box 3474, Daly City, Ca. 94015).

The silver award winners were:

7. **Mac Street Journal** - MacIntosh
8. **Research in Word Processing** - Business
9. **PC Accounting Trends** - Business
10. **Astro/Talk** - Specialty
11. **Valnews** - Epson Computer

Out of eleven awards, **Current Notes** was the only Atari user publication to receive recognition. Note, Radio Shack/Tandy, Commodore 64, Compact, etc., newsletters were not so honored and that 5 of the eleven awards went to specialty/business newsletters. The complete articles covering the awards are in the June 3 and June 17 issues of InfoWorld. Concerning Current Notes, Dvorak stated that it is "a steal at $12 per year. Published by the Washington Area Atari Computer Enthusiasts, it's 40 pages of topical news, reviews, and gossip for Atari owners."

What is of particular interest, to many on the staff anyway, is how inexpensive the subscription price for Current Notes is relative to the other award winners. I have already advised Joe Waters, the Editor, to raise the rates so he can start paying his columnists. Incidentally, this award reflects the long hours Joe has put into making Current Notes what it is to day. Joe doesn't get paid either. This doesn't bother the staff since he is management. However, it might be nice the next time you see Joe to go up to him and say "thanks" for his efforts.

For the ATR-8000 (CP/M) owners, I have provided the address of Foghorn in case some of you may want to subscribe. This looks like an excellent buy. Also, don't forget the Washington D.C. Osborne group (Capoug) which has over 165 disks in it's CP/M library as well as MS/PC-DOS disks ($15/year).

The Computer Market. The Programmer's Letter wrote regarding the Atari ST in its April newsletter:

> Software developers are likely to have trouble getting the information necessary to support the machine. That means that those who succeed will have little competition for quite a while. If I were going to start a new software company for the education or entertainment market, I'd take a hard look at the Atari ST. The "critical mass" necessary seems quite low.
>
> Quite a few publishers have already begun work using specially built machines for development.

What struck me about the quote was how in very few words, the opportunities as well as the inherent risk associated with developing software for the Atari ST was expressed so well.

The newsletter also displayed some very interesting estimates/guesses on market size (total) and shipments per month for the major computer manufacturers. These estimates probably represent activity for the first quarter of 1985. Selected data of interest is presented below:

Computer	Total	Monthly
Apple II-all	2,100,000	80,000
MacIntosh	280,000	30,000
IBM PC	1,400,000	80,000
XT	600,000	40,000
AT	20,000	6,000
Commodore 64	3,200,000	110,000
Tandy Color	450,000	30,000
CP/M-80-all	1,800,000	15,000
Atari 800	1,200,000	60,000+

The plus after the Atari monthly figure was not inserted by me. It reflects how hard it is for anyone to obtain current production estimates from Atari. Further, I believe that the estimate for Atari's total installed base (1.2 million) may be low. The cause being sales for the old 400 and 800 (pre XL/XE period). However, given that this table represents a "heroic guesstimate", 100,000 plus units from a software developer's market perspective is meaningless. On the other hand, it did matter greatly to Atari since these old 400 and 800 computers sold in the $600 and above range - not $89. Finally, I would estimate that currently Commodore's monthly selling rate is at less than half that shown in the table above.

Software Piracy. The question of software piracy, involving the corporate world, is receiving renewed attention. The July issue of High Technology contains an article entitled "Foiling Corporate Software Pirates" which is well worth reading. It is not the usual sanctimonious pap that rants against high-school juniors, seniors, etc., pirating software. It deals with the big-buck losses being experienced by the copying of business

programs. It illustrates in straight forward terms what the usual protection schemes look like, how they are defeated by enterprising pirates, and the counter-attack being prepared by the software industry. The new protection scheme is a hardware lock which attaches to the serial communications port (see article for all the details as well as explanation of bad sectoring).

From my reading of this article, it appears the software industry is again missing the point. If the price was right (reasonable), a good percentage of the pirating would cease. For one thing, it is a pain to copy the documentation for these large, complex business programs. From a corporate perspective (not individual) there really does come a pricing point where the monetary gain is not worth the risk of violating copyright laws. Naturally, the software firms have considered every sort of hardware/software protection scheme but, as far as I can determine, inadequate attention has been given to the question of corporate economic incentives. Furthermore, at some point companies, who are individuals after all, are going to get sick and tired of those firms which place extreme protection on their products and simply stop buying follow-on products out of revenge. Wait a minute....haven't we seen this already?

Speaking of copying, I hear through the rumor mill there is a war going on between Happy and Electronic Arts. Happy, of course, is Happy Computing -- the copy program makers. Electronic Arts is the firm that has brought out all those great games/simulations e.g., MULE, ARCHON, etc. I hear that Happy, which has been promising version 7.0 of its program for quite a while now, is in a hold pattern. The delay will continue until Electronic Arts releases the Atari versions of its new games. Electronic Arts, for its part, will not release the games until Happy puts out version 7.0. I do not know whether there is any validity to this rumor -- it all sounds rather childish. I do know individuals who sent in money several months ago for version 7.0 and have heard nothing from Happy as to its release date.

The Printer Market. Well, you have heard by now that IBM has entered the printer market with a bang (Epson who made printers for IBM has been dropped). The Japanese, who currently dominate the computer printer market, are very nervous over the prospect of IBM being a competitor in this market. According to my correspondent in Japan (Mr. N.E. Cee), Mr. Epson dropped his tea cup at his annual Star-studded gala for Professional Writers when the news was announced over Tokyo Radio! Market outlook, if you are interested in a new printer, is for fierce competition in the months ahead with prices declining.

The new low cost $549 IBM dot matrix printer has a feature that all printers may soon be including as standard equipment. It has a front loading single sheet feeder for single pages and envelopes -- a great idea that will save time and torn envelopes.

Well that's it for the now, see you in the September issue .... Have a good summer!

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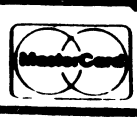
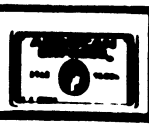




Jack Tramiel CES Interview

By Jeffrey J. Williams

Atari asked the Chicagoland Atari User Group (CL.A.U.G.) to help assist them with their exhibit at the Summer Consumer Electronics Show in Chicago. As one of the volunteers participating in the show, I asked Jack Tramiel for an interview that would appear in the newsletters of the various user groups I belong to (as well as any other groups that pick it up and choose to print it). He was most eager to talk to Atari users so he made time in a very busy day to talk with me. During the interview, I was somewhat nervous and sometimes had trouble following my notes, but Jack was very cordial and tried hard to put me at ease. We talked about CES, the ST series, the CD (compact disk) ROM device shown at CES, and Atari's relationship with user groups.

JJW: Atari announced that they would not be attending Summer CES. What prompted you to change your mind?

Tramiel: The CES show, the way we had to display it was too expensive to bring our booth, to refurbish the booth. It would have cost about $500,000 and I felt it wasn't worth it to spend that kind of money, that I could attract the people to come to a suite in Chicago during that time and to pay much less. When we were offered the present space, we took it because it cost much less. It was strictly economics. We are here to produce computers for the best price, for the best value, not to show off.

JJW: At this show, you are displaying not only the 520ST package, but also a 260STD with 256K RAM, operating system on ROM, and a built-in 3.5" disk drive. What prompted you to include the 260STD in your planned product line?

Tramiel: We feel that there are different buyers in this marketplace ... people who like to buy from K-Mart and people who like to buy from specialty stores, so we went ahead and designed two different kind of machines. There is the total system like the 520 which will be sold to specialty stores and a system like the 260 where the mass merchandiser, if he wants to, can buy it. It was strictly to be able to produce the volume and to satisfy our customers.

JJW: The 520ST will initially have its operating system loaded from disk into RAM. Do you hope to put it on ROM at some future point?

Tramiel: The 520 will be on disk only [NOTE: Atari has since announced that the Operating System WILL be available on ROM for the 520ST. Anyone purchasing the 520ST prior to the ROM availability will receive the Operating System on ROM. -JJW]. We will definitely have new machines constantly. Our aim is to continuously improve the product line. We intend to show at Comdex this year an even higher graphic machine.

JJW: Would that be the 32-bit machine?

Tramiel: No. We intend to keep the ST as the basic machine. What we will do is we intend to have an expansion box. In that expansion box we intend to put quite a few boards. One of those boards will be a 32-bit board. Not a machine, but just a board. It will turn the ST, which you own today, into a 32-bit machine if you want to.

JJW: That is exciting. Do you have any problems with me publishing this?

Tramiel: No, go ahead ... if I did I wouldn't have told you. You are the first one to be hearing this because to me, people like yourself being part of a club, you are my boss. You are the end user. You are the people that I am working to produce a product for.

JJW: Speaking collectivly for other users, we appreciate it [NOTE: I subsequently asked Leonard Tramiel what processor will be mounted on the board. He said Atari is not ready to announce that information.] You are showing an early prototype of CD ROM here that seems to be generating quite a bit of interest and excitement amongst the people who have seen it. You currently have a 20-volume encyclopedia stored on a 5" compact disk and the retrieval rate is astounding. What other applications do you see for the CD ROM?

Tramiel: There are many. They can be used for a law library of any state of the United States. You could have the whole Library of Congress with every book that's been published in the last 200 years. A lot of hospital information which is all public information for doctors. Instead of having to go into a data base in Minneapolis, he can have it right on his desk. There are hundreds and hundreds of public domain applications that could be put on that ROM.

JJW: So you see it for use initially perhaps as a professional reference device as well as an institutional reference device like for schools and colleges.

Tramiel: Exactly. And I am hoping that this is one service that we can sell to remote areas in other countries where people could have a whole library, like 42nd Street and Fifth Avenue.

JJW: It really brings to the present the concept of sitting down at a computer and being able to call up a wealth of information, something I thought was still years away.

Tramiel: Exactly. That's the whole idea, we are trying to bring it forward. I am trying to take away the "black box" image, that it is "not available"...it IS available.

JJW: Tell me about peripherals for the eight-bit line.

Tramiel: We will be expanding our drive capacity. We will have a 3.5" disk drive with a half-megabyte and one megabyte in the future. We have a number of different printers, including a daisy wheel printer. The whole idea as far as the eight-bit line is concerned is to keep that product alive and expand it. As far as beginners, as far as education, as far as people who don't have much money, the eight-bit line is a fantastic product. We will continue producing it and expanding it. I'm hoping in 1986 or even the end of this year to have a 256K eight-bit machine with a built-in drive.

JJW: 5 1/4"?

Tramiel: No, 3.5". We want to keep all those products alive and build on the software.

JJW: Perhaps you've just done it for me, but could you describe your vision of the ideal Atari personal computer. If you could just point at the table and it would be there, what would it be like?

Tramiel: It would not be on the table. My ideal Atari computer of the future is to have a television with a remote keyboard to be your computer.

JJW: I've respected your work both at Commodore and especially now with Atari. I've read the book "The Home Computer Wars" which I took to be the Jack Tramiel success story, rather than being the Commodore story or the Michael Tomczyk story. I got out of it a greater admiration and respect for you. Have you read it and what do you think about it?

Tramiel: I did read part of it because he is an associate and a friend of mine. He asked me to read it and give him comments beforehand. I did not want to give him any comments and I did not give him any comments. It's the way he interpretted the way I have operated and there are many paragraphs that are not correct, but that's the way people write.

JJW: Would you say he captured the flavor of Jack Tramiel?

Tramiel: I would say about 80% he did.

JJW: Could you run down the expected availablity dates and prices for the current planned line of Atari products?

Tramiel: The 520ST system (512K RAM, half-megabyte 3.5" disk drive, & high resolution monochrome monitor) will be sold in July retails for $799. The 260ST will be available in October or end of September and we'll have 2 machines...one will be $395 without the drive and $495 with the drive.

JJW: What about the other monitors that will be available for the ST's?

Tramiel: In case you would like to have a color monitor, for $200 more you will be able to get the color monitor instead of the monochrome. So for the black & white, it is $799, with the medium-res color monitor it is $999.

JJW: And the color monitors will be available in July also?

Tramiel: Yes.

JJW: James Copeland (Vice President of Marketing) in a staff meeting I attended the day before the opening of CES, said that Atari has some plans and directions that Atari would like us, the user groups, to take with Atari distributors and mass merchants for which Atari is prepared to help support those user groups. Could you elaborate on those plans and what kind of support is planned for cooperative user groups?

Tramiel: I really am not familiar with what exactly he said. I believe very much in sex. When I mean sex I mean for people to be involved...that's what I call sex. When I have a question to ask, "Is this machine good?", "Do people like it?", I like to go directly to the users and ask them those questions. Like I am trying to offer you the 520ST first...to find out what is going on. If a retailer needs help, we don't want to go out and hire some models, but to find a way how to give this money to your club so that you can really help each other and at the same time to try to help that retailer to sell the product. And as you know who he is selling to, you will get that many more members and we will pay you for that effort so you can use that money for improving your club. That is what I was trying to tell Jamie (James Copeland) and now he is trying to go forward on it.

JJW: I was asking David (David Duberman, Atari's User Group Coordinator) about the same thing. He said that the plans are not really defined just yet.

Tramiel: I am giving you what the aim is. The aim is that you people in the next 2 or 3 years, with the computers coming out, can help the people that do not know computing by bringing them to the users groups.

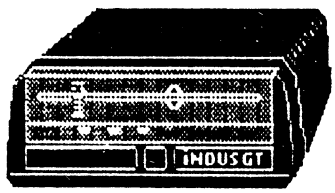
JJW: I agree. I don't want to take up much more of your time, in concluding this interview ... do you have a message that you would like to convey to the Atari users that will be reading this interview?

Tramiel: The message I have for them is a very simple one. I appreciate all the patience they have had over the years. Now we are here, we are producing the best products and I hope they will be as proud of us as we are of them.

Synchromesh I/O for INDUS Drive

by Jack Holtzhauer

Owners of INDUS GT drives who did not receive SYNCHROMESH I/O at purchase may be interested in learning that this high-speed I/O utility is now available. You may obtain a copy in one of three ways. Return your original INDUS DOS disk, with $2.00 to cover handling, and your disk will be returned with the new file added. Or, if you prefer, you may order DOS 2.35I from INDUS for $9.95 and receive a new DOS disk accompanied by a spiral-bound owner's reference guide and instruction manual. The manual is said to be much more comprehensive than the booklet originally furnished with the drive. Your final option? Ask your users' group to order DOS 2.35I and the manual for you. Group purchases of 10 or more are priced at only $7.95. Inquiries and orders may be directed to Ms. Helen Lemich, Sales Department, INDUS Inc., 9304 Deering Avenue, Chatsworth, CA 92311.



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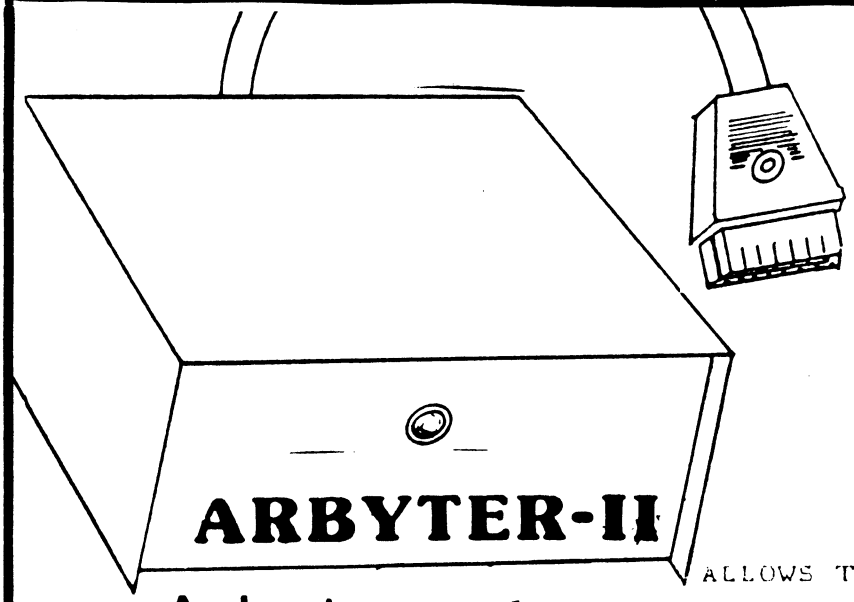

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Arbyter-II

Reviewed by Joe Waters

Arbyter-II,IV. Arbyter Corporation., P.O. Box 2515, Reston, VA. 22091. List Price $99.00

With the price of Atari computers falling dramatically, the temptation to buy a new 130XE or pick up an 800XL is very strong. Besides, with all the kids in the house, you can hardly get to your Atari yourself anymore! Whatever the justification, I suspect the number of multiple-Atari households is growing significantly. But, the prices of peripherals, although also falling, have not dropped as much as computer prices. Wouldn't it be nice if you could just pick up a new computer and be able to "share" all your peripherals with the old Atari?

Well, brace yourself, because you can do just that! The Arbyter-II is a product whose time has come. This little black box (roughly 4 inches wide by 4 inches deep by 1.5 inches high) is a very small, simplistic device. On the front end is nothing more than a small bulb that lights when the unit is working. On the back are two serial input/output (SIO) ports common to most Atari peripherals and a short 12" SIO cable. What do you do with it? Simple. Plug a cable from your Atari 800 into one of the back serial ports and then plug a cable from your new Atari 130XE into the other serial port. (I am only using the 800 and 130XE as examples, and two Atari computers will do.) Now plug the unit's SIO cable into your disk drive. That's it. You're done. Now both of your computers share that disk drive and everything else linked up through the serial port of the disk drive. There are no electrical plugs to add to the already overcrowded outlets. There are no on/off switches. There are no options. Just plug in the serial cables and you are ready to go. And the best part? It works.

Put DOS into the drive and turn on your 800. DOS boots up. After it is done booting, turn on your 130XE. DOS will boot up on that machine. Both computers are using the same disk drive. Ask for a directory on your 800 and while it is printing, ask for a directory on the 130XE. The 800 directory will print and the 130XE will return an error code of 138 -- device does not respond. You see the Arbyter serves as a traffic cop. Although both computers have access to the drive, only one can use it at a time. The first computer to do a disk request gets access; the other must wait until the line is free.

I said earlier that there were no options, but that is not strictly true. You see you can insert the Arbyter-II at a variety of places in your configuration. If you have two disk drives, you could connect your components this way: 800 to D2 to Arbyter to D1 and 130XE to Arbyter to D1. (Interface, printer and modem connected to D1.) Now both drives share Drive 1 (and the printer, etc.) but Drive 2 is available only to the 800. Afterall the 130XE has its own RAMDISK. Or suppose you have 3 disk drives. Each computer can have a dedicated Drive 2 while sharing Drive 1. Obviously, there are many possibilities. All work equally well.

Notice that I did not mention the ATR 8000 as one of the possible peripherals. One reason is that I do not have an ATR8000. But another reason is that there are some peculiarities in using this system with an ATR. I understand that a modified Arbyter will be available for ATR owners. ATR owners should wait awhile, therefore, before writing their checks.

I also noticed two other peculiarities while testing the device. If you have an Atari 1030 modem in your setup, the Arbyter won't work unless the 1030 is on. If the modem is on (you don't have to actually be using it), everything works fine. This problem does not appear with the 850 interface of a Hayes modem.

Another problem crept up when one of the computers was using a cartridge game. Many cartridges have protection mechanisms that prevent access to the disk. This also prevented the other computer from accessing the disk. The cartridge problem did not appear in cartridges that normally provide disk access (BASIC, ATARIWRITER, ASSEMBLER EDITOR, etc) and not even in all games.

If you have two computers, the Arbyter-II is an excellent little device that allows both computers to share a complete system configuration. I did not test the Arbyter-IV which allows four users to share peripherals. Not many homes have four computers, but many schools do. The four-user variant would obviously be very useful in a classroom environment where one drive and printer could be made available to four different students.

The Arbyter is available locally from STS Video Supply, 1073 West Broad Street, Falls Church, VA (703) 237-0559.

Classified Ads

LEADING EDGE GX-100 dot matric printer; two text sizes; fine graphics capability; graphics driver program included; without cable. $125.00 - Mark Ausley (703) 221-6382.

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PROWRITER printer, complete with 850 interface, $300. Call Rene, (703) 860-3788 after 6:00.

NOTE: Classified ads are free to subscribers of Current Notes. Call or write the editor, Joe Waters, 122 N. Johnson Rd., Sterling, VA 22170. (703) 430-1215 prior to the 12th of the preceeding month of publication.

BATTLE BYTES:

by M. Evan Brooks

Napoleon at Waterloo, KRENteck Software, P.O. Box 3372, Kansas City, KS 66103. List Price $34.95

Turning to a Third World Producer (in truth, everyone in the computer wargaming aside from SSI constitutes this class), KRENteck's NAPOLEON AT WATERLOO is the subject of this month's review.

NAPOLEON AT WATERLOO is a simulation of the most studied and famous battle of Western civilization, Napoleon Bonaparte's final fling at glory on the 18th of June 1815. The most surprising aspect of computer simulations is that KRENteck's effort is the first for the Atari covering this Napoleonic battle [SSI covered it in an early game (Apple version only)]. Board wargames have covered this battle in great detail, cf. **Battles of the 100 Days** (OSG), **Napoleon's Last Battles** (SPI), **Napoleon at Waterloo** (SPI), **Thin Red Line** (Yaquinto), **Wellington's Victory** (SPI). Coverage ranges from breaking down the entire battle to battalion/company formations (**Wellington's Victory**) to corps level (**Napoleon at Waterloo**).

SPI's NAPOLEON AT WATERLOO bears the greatest resemblance to KRENteck's NAPOLEON AT WATERLOO. The scale is strategic/operational, with both simulations covering the entire battle in a quick-playing form (the former utilizes movement in 400 yard increments, while the latter uses hex areas of 275 yards).

This writer has some familiarity with the Battle of Waterloo, having done a treatise on Grand Tactial and Strategic Misapplications by Napoleon I during the Waterloo Campaign (13-18 June 1815) for Command & General Staff College plus extensive readings on the battle coupled with a physical inspection of the battleground itself (highly recommended for the grognards [literally "grumblers", the affectionate term for Napoleon's Old Guard and today, for the hard-core gamer]). For the gamer desiring more exposure to the subject, the following texts are recommended: Chandler's Campaigns of Napoleon (the classic text), Esposito's Military History and Atlas of the Napoleonic Wars (expensive, but worth it), Lachouque's Waterloo (superb reproductions and text), Chalfont's Waterloo (a recent text covering the battle by three authors, each regarding it from his national perspective, i.e. English, French, Prussian), Howarth's Waterloo (more novelistic in approach).

As for the computer simulation, the design is similar to ROME AND THE BARBARIANS (published by the same designer), both of which owe more than a passing debt to Crawford's EASTERN FRONT. The map is recognizable but plain; certain landmarks have been deleted (i.e. the "Sandpit" and the sunken road). Terrain mainly shows ridge lines, forest and the two critical man-made defensive points of Hugomont (British right) and La Haye Saint (British center-left). French units list corps commanders and strengths, while the Allied (British and Prussian) units list only strengths and nationality.

Input is via joystick, quickly executed and easily adaptable to changing circumstances. The game is playable in solitaire only; can you save the First Empire? Time flows inexorably in the simulation, and as the instructions point out, the gamer will not be able to coordinate attacks in widely separated portions of the battlefield, since only 4-8 units may be coordinated at a time. The game may not be saved (not a tremendous handicap, since a complete playing may be done in 45 minutes); while the game may be paused (for that snack break or the telephone), no orders may be input during the break.

Beginning at 11:00 (Napoleon began late in order to give the ground time to dry so that his artillery units could have mobility), the simulation ends at 9:00 pm. The Prussian army enters from the east at 4:00; if the British have not been demoralized by this time, the player will face a losing two-front battle.

Historically, Napoleon's strategy was the direct approach. Hit hard in the center, after softening up by artillery; use the Imperial Guard to mop up the remnants -- direct, lacking subtlety and unworthy of the Master. But as the Emperor noted, one only has a limited time for war.

Thus, a main thrust in the center-right, with a feint towards Hugomont (French left). This feint became all too real, and utilized valuable troops better used elsewhere. After charge and counter-charge in the center-right, the Guard was called in to finish the job; the Prussians were already appearing on the battlefield (French extreme right), and when the Guard was repulsed, the French army disintegrated. A better strategy would have been attacking the British right, since such an attack would have been the most direct threat to the British supply lines (and also, the British line was unbalanced, with 60% of the combat strength to the left).

Strategically, Napoleon's major objective was the defeat of the Allies (British and Prussian) in detail. Having blooded the Allies separately (Quatre Bras and Ligny), Napoleon had detached one-third of his army to screen the Prussians. The commander, Marshal Grouchy, failed, and thereby permitted the union of the Allies on the field of Waterloo (actually, La Belle Alliance; Waterloo was a town further off, but the victors named the battle so that it would be easily spoken by the British).

It is important to remember that the British army depended on a supply line to the west (and the coastal ports); the Prussians depended on lines to the east. If Napoleon had managed a substantial defeat of one side, the other Ally would have had to fall back on his supply line, and away from any relief attempt. Thus, the road network is essential (but totally omitted in this simulation). If the French had defeated the British, they would have continued to march on Brussels (north); in all simulations heretofore, French victory depended on defeat of the Brtish and exiting the map to the north. In Napoleon at

Waterloo, no French exit is possible to the north. After defeating the British, the French must turn and defeat the Prussians. Historically, this is inaccurate; Napoleon would have been better off pursuing the British, waiting for Marshal Grouchy to rejoin his forces, and then turning on the Prussians with his reconstituted army. Of course, such a victory would have been temporary at best. Having been declared an enemy by all of Europe, Napoleon was well aware that an Austrian army of 100,000 was only a few days behind and a Russian army of 200,000 only a week behind.

But for victory in the simulation: Hugomont may be taken (historically, it did not fall). Use the artillery, two infantry corps and the cavalry to hit it from three sides. Don't worry about the time; this front is secondary at best. Your main thrust is center-right. Use the cavalry to outflank the British left flank. Follow up with the infanry, and roll up the British in a right-to-left cavalry/infantry assault. La Haye Saint will not fall, but will be evacuated as the British line becomes untenable.

Key to Victory: Do NOT commit the Imperial Guard against the British. Their lowered morale and consequent impact on the entire Frenh army will insure defeat. Instead, have the entire Guard take up a file position at the French right. Beginning around 2:30-3:00, have the four batteries of artillery move to a supporting role two hexes to the rear of the Guard (this allows retreating space for any demoralized Guard units). When th Prussians arrive, their cavalry will probe the French line. Your artillery should compel their retreat. The entire line will then be attacked in several positions, but your artillery and Guard should be able to withstand the thrust. When the Prussians begin a withdrawal, you should advance the Guard and attempt maximum destruction.

Additional Hint: use cavalry to pursue demoralized and retreating Brtish units. There is nothing like the cavalry to cause casualties amongst retreating infantry units; pursuit should be maintained until the British units are forced off the field. Similarly, if the Prussian artillery is open, an attack against artillery by formed troops can cause massive casualties. Beware: while the assault is being mounted, the unit may be demoralized itself.

If these tactics are applied, the French should achieve a victory of 120,000-130,000 points. Overall casualties should be c. 24,000 (French), 23,000 (British), 22,000 (Prussian).

When an army is demoralized, the national anthem of the opponent plays (God Save the King or The Marseillaise). Similarly, victory at 9:00 is announced by the winning national anthem.

Overall pursuit of the British may begin once demoralization occurs. If the French are demoralized first, then victory is out of reach.

My overall recommendation is muted. The game is interesting and quick for the novice; at a price under $25, it is certainly worth it. However, its historical accuracy is limited at best, and the true gronards may be severly disappointed. A cotton candy wargame that is recommended for the newcomer, but NOT for the experienced gamer or historian.

Postscript: With the proliferation of wargames, it is becoming impossible to review them in depth. Therefore, I would appreciate any reader with a detailed knowledge of a heretofore unreviewed game writing to me (4008 Patricia Street, Annandale, VA 22003) concerning your findings. **War in Russia** strategic guidance is needed at this time. Questions and strategic hints will also be supplied to the needy.

ALSO, the next column (September) will have a review of ORIGINS, the National Wargaming Convention at Baltimore during the last week-end in June. Most computer wargame companies will be present, and it should be an interesting experience.

GOING ONLINE

by Ed Seward

This month I'll cover two topics; both were selected because of the number of questions I've received on them.

All About Modems

Before you Buy a Modem. The first subject is how much of a modem does one need. To determine this, ask yourself several questions.

1) Am I going to do a lot of large file transfers (primarily uploading and downloading)?

2) Am I going to operate a BBS or do I want to be able to call the computer at home from work?

3) Do I want a variety of compatible software or will a couple of programs suffice?

4) What type of interface, if any, is required for the modems I am interested in?

5) Finally, how much am I willing to spend for a modem?

If money is not that critical or you answered yes to question number one; you should consider a modem capable of 1200 baud. The Hayes 1200 seems to have the lead in this catagory. An interesting modem that I don't know anything about except for an ad is the Q-Modem from Quantum Microsystems -- 1200 baud auto answer and direct connect for a list price of $150. A person considering this modem should check into how compatible the modem/handler is with current software. This should be done for any modem one is unfamiliar with. An example of products that seems to run into problems with new systems are the MPP 1000 modems which use two joystick ports instead of the serial port. In defense of those modems there is a lot of software available, MPP and industrious MPP owners are still improving the MPP handlers. Also, the MPP does have an auto answer mode - that is, it can detect that the phone is ringing. (The MPP's price in the DC area is in the $80 to $90 range).

Selecting A Modem. Currently three types of modems are very popular; Hayes and the Hayes compatibles, MPP1000E, and the Atari 835/1030. Without modification the 835/1030 modems cannot detect a ring and automatically answer the phone. However, the 1030 has two big advantages. First, there are a couple of handlers available to make the 1030 compatible with software written for the 850 based modems. One of these handlers, RBIN, can even be used to run both the 850 and the 1030. This makes it very easy to use the latest versions of AMODEM. An example of this is AMODEM7 which is on ARMUDIC - it runs with most 850 based modems and the 1030 without any modification when using RBIN. The other advantage is that the 1030 is selling for $60 to $70 dollars in the DC area.

It sounds like I am favoring the 835/1030 doesn't it? It should, I've had mine for a year and a half. With the exception of the first month of searching the country for AMODEM type software, I've enjoyed using it. I can't read fast enough to read a message at 1200 and I don't have a BBS so I don't miss the auto-answer.

Modem Interface. For those people that decide to go with a Hayes or a Hayes compatible modem, I would recommend stopping by a meeting of the TELECOM SIG. My reason for this suggestion is to get a feel for the best way to interface the modem to the computer. I haven't used the 850, ATR8000 nor the R-Verter.

Telecom SIG. Let me point out here that the TELECOM SIG isn't only for "experts". The SIG is there to help. Why not come to the next meeting which will be on July 14, before the NOVATARI main meeting.

A Downloading Tutorial

Well, now that is enough of my ramblings on modems. On to another source of questions -- how to download. This month I'll just cover downloading from an ATARI BBS - particularly ARMUDIC. Elsewhere in this month's Current Notes, Ted Bell covers the use of the [F]iles for download command.

Preparing to Download. Let's assume the file we wish to download is "HOMETRAN" -- it is the ready to use Homemade-translator from ANALOG and is up on ARMUDIC. The information in the files for download section says "HOMETRAN" is in ATASCII (in ATASCII a byte can have a value between 0 and 255 whereas ASCII has a range of 0 to 127); it is an application program that is in binary/object load format and is 85 single density sectors long. To download this, and most files on an ATARI BBS, you should be in ATASCII translation or mode. First, we make sure there is enough room on our disk for the file we are going to download. The command to set up a download on most terminal programs is the [SELECT] key for the command menu then "R" for 'Receive' or 'Receive XMODEM'. Your computer will then ask for a filename.

Naming the File. The name does not have to be the same as that on the BBS; but I wouldn't change the name much aside from a filename extension. The reason for this is that things could get confusing after you download a few files. (You will find that most BBSs will have the same name or similar name for a particular file -- except when someone gets creative and a file starts circulating under more than one name. Some terminal software expects a device ("D:", "D2:", etc.) to be specified and some don't. All of them will accept a device identifier as part of the filename so I'll include it here. So, if one is going to download "HOMETRAN" from ARMUDIC then a good response to the filename prompt would be "D:HOMETRAN.BIN". The "BIN" extension is short for BINary. Other common filename extensions often used in place of ".BIN" are: ".COM" for COMmand, ".OBJ" for OBJect and ".EXE" for EXEcute. After entering the filename and pressing <RETURN>, the program should inform you in some manner that you should press [START] when you want to begin the download. However we are not ready for that yet.

Downloading the File. The next step is to tell the BBS that we wish to download a file by entering "D<RETURN>". The BBS will then prompt us for a filename. The name must be entered exactly as it appeared in the list of files for download. A slightly faster method is to combine the two steps above by entering "D HOMETRAN<RETURN>" since HOMETRAN is the file we wish to download. The BBS will then ask if we are using XMODEM protocol - respond with a "Y". The BBS will then let us know it is ready to start the download with "Ready to send". Now press the [START] console key on your computer.

XMODEM Transfers. Note that under XMODEM you'll receive fewer blocks than the length of a file in sectors. An XMODEM block contains three more bytes of actual data than does a sector (128 versus 125). Most of the ATARI terminal programs display the blocks as they are received. The first block is the one that I look at most closely to determine whether the proper filename extension has been used. The easy ones to double check are listed BASIC, ACTION! and assembly language source code. The binary load files can also be verified fairly easily. The first two characters are character 255, the insert a blank control character. A saved BASIC file will start out with two or three heart graphics characters, character one. The AMS files contain four or five numbers over in the first block. As you can see the first block is worth a close look. So if everything goes smoothly then on successful completion of the download, your software will display a messsage stating the file was received.

Summary. I am providing a summary of the steps in a download for quick reference.

1) Identify file to download.

2) Make sure you are using ATASCII translation.

3) Make sure there is room on the disk for the file.

4) Press [SELECT] console key.

5) Enter the letter for 'Receive XMODEM' command -- usually "R"

6) Enter filename for storage on your system.

7) Enter BBS command for [D]ownloading and the filename of the file on the BBS (there should be a space between the "D" and the filename)

8) When asked if using XMODEM protocal, respond by pressing "Y"

9) When the BBS sends 'Ready to send', press the [START] console key.

SOME CLOSING WORDS

If you found the downloading tutorial helpful and would like to see something similar on other commands; let me know. Also, if anyone has a question or problem feel free to give me a call or write. Ed Seward, P.O. Box 6826, Alexandria, VA 22306, tel. (703)-960-6360.

ARMUDIC UPDATE
(703) 569-8305

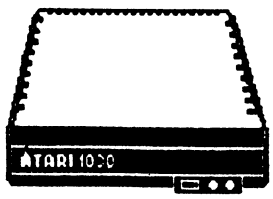
At this time, we already have almost 200 passwords validated in the BBS, which is creating very high activity. All members have 44 minutes of user time daily; however, a little thought will indicate that if everyone who gets online uses his or hers full time of 44 minutes, only about 20 - 30 people could access the Board, and that is assuming callers all during the 24 hours day and night. One answer would be for me to cut down the daily access time to say 25 minutes. But a better answer is, I believe, for everyone to just think about the fact that when you are on-line, that many others are waiting to get on. Try to think out what you wish to do before you get on the BBS. This will cut down the idyl time when you are on. Don't download things you really don't need. Remember, someone may be waiting to get on, who just wants an answer to a technical question that is holding him up. Most Boards have a policy of no more than two calls a day and no more than 2 downloads per day. Since NOVATARI and NCAUG members are the highest level of computer people, I believe the posting of this message will solve the problem.

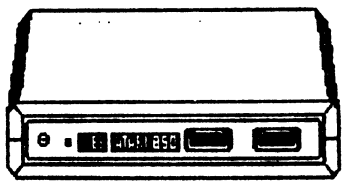
With the addition of the new Teac quad density drive and the special power supply and with about 20 modifications (mostly by Bruce Blake) the BBS seems to be much more reliable and running smoothly. We are experiencing only about 2 or 3 crashes a week. The BBS does require a lot of attention by us - validating passwords, making back-up copies, trying various mods to make it more reliable, so bear with us, if we don't get back to you right away, when you leave messages and so forth. We love the BBS and our intention is to make it one the best and it sure is progressing in that direction. We do get a little "Foremitis" now and then.

In the present configuration, the BBS has a total of 14,300 single density sectors or 1,809,200 Bytes.There is a good command that many of you perhaps would like to use: when the welcome message is running (or any other file) if you hit control "N" the system will automatically go to the next item.

Don't be afraid to chain commands. A good one is "F M" This will give you all the music downloads without stopping at the download selection file.

Nice typing with you,
Ted & David Bell, SYSOPS
Bruce Blake, Technical SYSOP



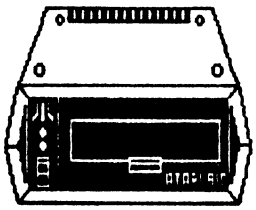


Action! Action

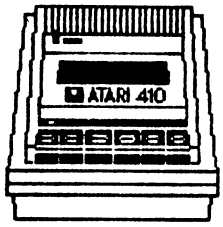
by Jon Smith

In this month's Action! Action, I will explain how to use the Atari 800XL's extra 14k memory in your own Action programs. For those of you who don't have an XL, I'll make it up to you next month, I promise! But first...

VBlank Revisited.Boy, am I embarrassed! The two five-byte machine language blocks in the VBlank PROCedure were unnecessary. These code blocks are necessary, however, for Display List Interrupts, which I'll cover at a later date. Note that the four-byte machine code block at the end of the VBlank PROCedure is necessary. The corrected VBlank PROCedure should read:

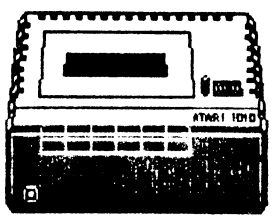


```
PROC VBlank()
BYTE Color4=712 ;<--Used for the
                ;   twirling colors
                ;   example.

  ;Place Your VBlank Routine Here!

  Color4==+1    ;<--Used for the
                ;   twirling colors
                ;   example.

  ;Now exit!

  [$4C $E45F]
  ;Change $E45F to $E462 for
  ;Deferred VBI

RETURN
```

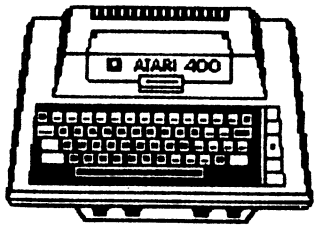


The version printed last month worked the same as this, however it took up extra memory and stole a small amount of processor time for your VBI. Now on to new business...

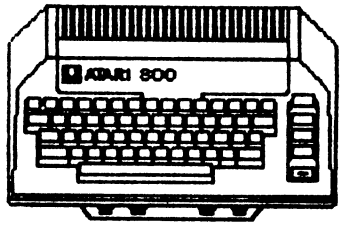
The Atari 800XL's Extra 14K RAMI'm sure many of you are aware that the 800XL has extra RAM tucked away where BASIC can't get to it, but for those of you who aren't...Under normal operating conditions, the Atari 800XL has 16K of Operating System ROM located at $C000-$FFFF. This ROM, however, can be turned off, enabling 14K of free RAM. Where did the extra 2K go, you may ask. The memory from $D000-$D7FF is the I/O region, thus it can't be disabled. Of course, with the OS disabled, you have to be careful what you do!This extra memory can be very useful in Action. For example, you could set up a large array and place it in memory at $C000 or $D800. Whenever you want to view or modify this array, you turn off the ROM, enabling the RAM. When you're done with the array, you turn the ROM back on, disabling the RAM.Listed below are two PROCedures, RAMon and ROMon. These procedures are self-explanatory, and they are commented.



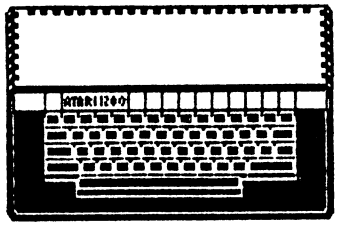
```
PROC RAMon()
BYTE PORTB=$D301,NMIEN=$D40E

  ;Enables 1200XL and 800XL RAM
  ;from $C000-$CFFF and $D800-$FFFF.

  [$78]         ; SEI, Disable IRQ's
  NMIEN = 0     ; Disable NMI's
  PORTB = $FE   ; Enable RAM,
                ; Disable ROM

RETURN
```




```
PROC ROMon()
BYTE PORTB=$D301,NMIEN=$D40E

  ;Disables 1200XL and 800XL RAM
  ;from $C000-$CFFF and $D800-$FFFF.

  [$58]         ; CLI, Enable IRQ's
  NMIEN = $40   ; Enable NMI's
  PORTB = $FF   ; Disable RAM,
                ; Enable ROM

RETURN
```

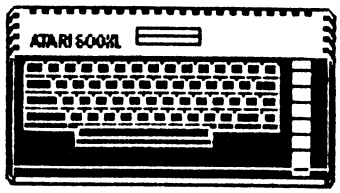


These routines are easy to incorporate into your own programs. Just remember the following very important rule: NEVER, EVER, use an Action PROCedure that needs to call an OS routine while the ROM is disabled. Don't even think about it! Examples of such routines are: The built-in Print routines, Plot, DrawTo, any I/O, VBlank calls, or any of your own PROCedures that call the OS. A good rule of thumb is to turn the OS ROM off only for an instant, modify the array, and re-enable the ROM. If you're sure of yourself, you can attempt to leave the OS off while processing the array.The following program zeros out the XL's extra RAM:

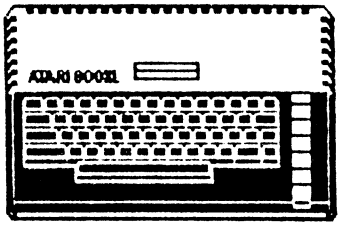


```
;Include RAMon and ROMon here,
;both listed above.

PROC Zero_XL_Memory()

  RAMon()  ;Enable the RAM.
  Zero($C000,$1000)
  Zero($D800,$2800)
  ROMon()  ;Enable the ROM.

RETURN
```

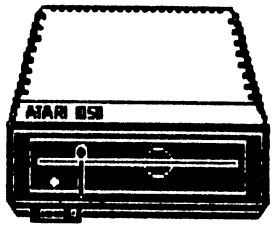
The program listed below zeros out the memory in a different way: It initializes a BYTE ARRAY at $C000 and fills it with zeros.




```
;Include RAMon and ROMon here,
;both listed above.

MODULE  ;Set up some global variables.

;Set up an array to cover all
;of the 800XL's extra RAM.

BYTE ARRAY xlram=$C000

;This array has $4000 elements,
;16384 decimal.  However, since
;$D000-$D800 are always ROM,
```

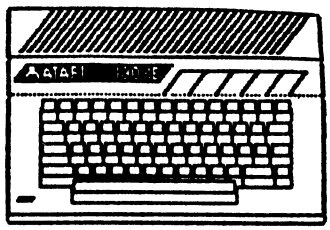


```
;elements $1000-$1800 are invalid.
;(4096-6144 decimal)

PROC Zero_Array()
CARD counter

  RAMon()
  FOR counter=$0 TO $1000 DO
    xlram(counter)=0
  OD
  FOR counter=$1800 TO $4000 DO
    xlram(counter)=0
  OD
  ROMon()

RETURN
```



After trying all these demonstrations, you're probably wondering why the screen flickers when you disable the ROM. This is because the ROM character set, located at $E000-$E3FF, is also disabled. One way of stopping this is to disable the screen entirely when turning off RAM. Inserting a Poke(559,0) in the RAMon PROCedure and a Poke(559,34) in the ROMon PROCedure will effectively black out the screen when the ROM is off. Another way to avoid the flickering is to move the ROM character set into RAM, however you lose some of the hidden RAM. The following PROCedure will move the ROM character set into RAM.

```
PROC MoveCHSet()
CARD i
BYTE ARRAY chset=$E000
BYTE x

  FOR i=$0 TO $3FF DO
    x=chset(i)
    RAMon()
    chset(i)=x
    ROMon()
  OD

RETURN
```



Once the character set has been moved into RAM, make sure you steer clear of $E000-$E3FF with your arrays.That about sums it up for accessing the XL's extra memory in Action! I hope you find the information presented useful. If you have any questions or comments, call me at (703)437-8652 or find me at Novatari meetings.

Tips 'N Traps

Stevenson, Francese and Burke

Hello, people! Well, we've gotten even more messages from ARMUDIC this past month. There have also been some debates whether or not private messages should be left on a message base such as 'ADVENTURE Q&A'. There have been different attitudes towards this, and I'd like to try to make this as clear as possible. Messages are not to be left private UNLESS the writer and/or reader feel that the answer would, in some way ruin the adventure for other users playing that same adventure. If a user were to stumble across that solution, he/she would find the answer they were looking for, which they wanted to find out on their own. It would ruin the 'fun' of that section of the adventure. In any case, I hope those who read this understand this reasoning, and will look on, and continue to work at their adventures. Anyway, here is this month's set of user-submitted questions.

Subject: GRUDS IN SPACE

Q. On Saturn, what do you do with the coin you find? 1) Buy a flashlight, 2) Give it to Lord Deebo's butler, 3) Something else?

-Robert T. Menton

A. Robert, you give the coin to Lord Debo's butler to let you into his house. Otherwise, you will never understand the new part of your mission there.

-Jim Stevenson

Q. How do you get to Mr. Green once you get on Venus? All other hints about GRUDS IN SPACE would be appreciated.

-Robert T. Menton

A. If you have already gotten your stun gun in the Black, Smelly Swamp, you should go North through some thick foliage at the edge of the Swamp, East, and North again. Shoot the Venusian, and go North. Drop your gun at the corner (or Mr. Green will shoot you), and continue West. Once there, give the note to Green that Deebo gave you, and he will give you the Money-Maker.

-Jim Stevenson

Subject: HITCHIKER'S GUIDE TO THE GALAXY

Q/A. I'm having a hard time getting by the Buggblatter Beast of Trall. I would appericiate any suggestions. For those of you who are having trouble I'll tell you what I know, but I'll try not to give everything away. On Earth the dog yapps because he is hungry for cheese sandwitchs. The uper half of the room cleaning robot collects all JUNK that flies through the air. The Vogon won't read you the second verse of his poetry unless you enjoy the first verse. While improbability traveling, an important command is "Who am I?". Do everything that Ford did.

-Nick McDovell

Subject: CRANSTON MANOR

Q. I know this is an old one, but how do you get the gold nugget out of the caverns? I gave up on it two years ago and it still bugs me.

-Bruce Blake

A. Bruce, I think what you have to do is pull the torch. That should allow the gold nugget to be released. If it doesn't work, contact me by leaving me a message on ARMUDIC, or call me.

-Jim Stevenson

GAMEVIEWS

by Roland Gabeler

This month we will review another game that has been on the market for some time. The reason for this is twofold; one, that this game has recently been reduced to almost half price, and secondly, there simply are very few new games to review. Even the new releases from Broderbund-Synapse noted in Antic's July issue are old releases repackaged in pairs. July's Analog reviews **Dragonriders of Pern** that has been out quite some time. So, it appears game reviewers are facing the drying up of game software for Atari. New games with truly novel new play mechanics seem to be slow for all home computer lines, not just Atari. So we will try to review new games and some older games that decline in price to the bargin category.

Electronic Arts' **Realm of Impossibility** was released several months ago as a wider distribution and upgraded game of **Zombies** by Mike Edwards. The original **Zombies** game had been on the market for a few months under limited distribution of Bram Inc. software. I had read a couple of gloving reviews in game magazines, but couldn't locate a copy of the game through local or discounted mail order companies. Finally, after Electronic Arts purchased rights to and upgraded the game, I was able to purchase it locally. The anticipation was intense, especially after seeing the terrific artwork on the jacket, designed to lead the buyer to believe this game was an Indiana Jones style adventure. Well, the wait and anticipation was not worth all the excitement. The game is interesting, but certainly not all that I was expecting.

Realm has very fine graphics in the drawing of the scenery (129 different rooms). These rooms are drawn in beautiful three dimensional layouts, with catwalks and ladders for the onscreen player to traverse. But, author Edwards appears to have given so much effort to the background that the game elements and play mechanics were sacrificed. The storyline has the player in the role of an explorer, savior of the kingdom, who's job is to recover the seven crowns of the kingdoms hidden in thirteen dungeons by the evil cleric Wistrik. Seven of the dungeons can be entered directly from the games dungeon selection menu at the start of the game. The other six dungeons require a key to gain access. The key must be obtained the same way a crown is found. That is, you have to enter a dungeon and work your way through the different screens until you enter the room in which the key or crown is located. This search is a one way trip, you cannot go back until you have gained the key or crown ... or die trying.

You begin your quest with eighty hit points. Your quest is ended for you when you drop below zero points (your deceased body with an odor rising lays in a prone position at your last stand!) Your enemys are snakes, spiders, orbs and of course zombies. You have only one life per mission, but are not killed instantly by the touch of an enemy. Instead, you lose hit points for the length of time the enemy is touching you. This hit point loss is very rapid, I would guess it to be about five to ten points per second, or more. So as you can surmise it is important to avoid contact or move very quickly away when touched by an enemy. This is one area where the game becomes very frustrating. The wide rooms allow you ample room for escapes, but the game has a great many narrow passages and ladders on which the enemys can trap you. The coloring of the player in a light pastel is very close to the color of a white zombie. So in a tight situation the two touching each other causes momentary confussion often resulting in severe loss of hit points or death. To exit a room you must first guess which of the apparent exits is the real exit. Again, failure to guess the correct exit often results in becoming trapped at the one that doesn't work and the loss of many hit points. Once you have guessed correctly, you push on the wall where the path appears to leave the screen and the screen changes to the next room.

Of course the game contains some items to assist you in your search. This game is relatively non-violent (the exception is your own death). You do not have the ability to kill your enemies, but rather to inhibit their progress in chasing you by dropping crosses or use of three spells. You drop these crosses by pressing your button as you zig zag around a room. The crosses (and Spells) last only four seconds and then vaporize. You may also be inhibited by your own crosses if you forget and step on one. You will be stuck to it for the remaining number of seconds. The spells are found in scrolls in rooms of the dungeon, never more than one per room. The scroll also contains a few extra hit points. The three spells are: Freeze your enemys, they can't move; Confuse your enemys, they just wander around instead of chasing you; Protect yourself, they can touch and chase you but it doesn't cost hit points. Some scrolls contain only hit points in lieu of a spell. These spells are good weapons of defense but as I mentioned, awfully short in duration. You may retain several spells in your spell window for future use. To execute the spell is another problem. You must STAND STILL, press and hold the fire button, then move the stick in the direction of the desired spell! (if you can remember which spell is located in each direction). Most of the time you are actively being chased, so, it's very hard to convince yourself to stop and stand still, say nothing about remembering what direction to push the stick for a particular spell. The game does have an 'easy out', if you are close to your console you may press your spacebar to use the last spell you acquired. This seemed to be a last resort option to the game, but is usually the one used the most (in desperation).

One partially redeeming feature of this game is the two player "cooperative mode". I looked forward to playing this game with another player simultaneously in a team effort to defeat the monsters. While I have to admit this was sometimes fun, and led to a lot of screaming of 'help', the frustrating play elements of the game still swallowed most of the enjoyment. One nice part was the ability to revive your partner when he dies. This was handy but the revived player returns with a scant 10 hit points and has to run for his life to remain alive long enough to gain further points by picking up a scroll. You must BOTH push against an exit wall to bring on the new screen (next room). You both share the spells you find,

but only the player who retrieves a scroll will gain the additional hit points.

Scores seem to be a second thought in this game since survival is parmount. I must admit I played it a few times before I had time to notice the scores were even there! I guess the clue was the request for my initials at the end of a game. Points (referred to as 'Rating') are gained each time you move into a new room, at about sixty points per room. The high score is also noted in a box at the bottom of the screen.

OK, I guess I've been pretty hard on this game, but I was disappointed when I purchased it late last fall because other reviewers glossed over the flaws(?) I've attempted to point out to my readers. I am not hustling out to try to unload this game on someone who doesn't read my column (would they 'deserve' it?). No, I'm glad to have this one in my collection for it's beautiful graphics and even the hectic gameplay. I paid about $29.95 for my copy, but you can buy it from some local stores for $19.95. I like the game, but will never get my money's worth in play time. If this review has wet your appetite, because you don't object to the play mechanics I've complained about, $19.95 may be your perfect price. Prior to this game, I had purchased every new game introduced by Electronic Arts. I guess this proves their judgement and my taste are not always compatible. Certainly they have proven that recently by abandoning the Atari eight-bit line on most of their new product releases. I hope their decision is reversible since they have been one of the most innovative producers of game software.

NEW PRODUCTS

by Jack Holtzhauer

As usual, this column is devoted to new products for the Atari actually appearing on dealer's shelves. Except where noted, descriptions and claims are those provided by the manufacturer.

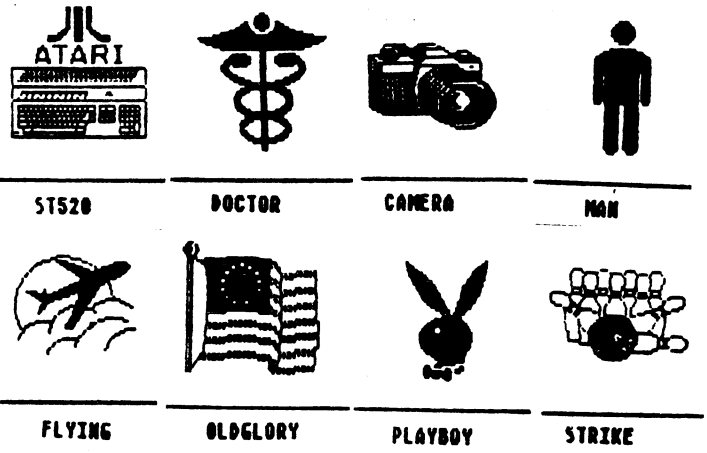
PAPER CLIP
Batteries Included
30 Mural Street
Richmond Hill, Ontario, CAN L4B 1B5

This long-awaited new word processor for the Atari has finally arrived on the shelves of local dealers. It promises dual text window editing, on screen help files for all key program functions, auto save capability, software generated double-column printing, drivers for all major priners, full mail-merge capability with SynFile+, and a print preview screen which displays formatted text exactly as it will appear on the printed page and allows editing on the preview screen. With a 155 page manual, it's priced at $49.99.

But wait a minute! Don't rush to be the first on your block to own this new product. It may not be the best buy for the novice user. Maybe not even for the fairly accomplished user, either. See Joe Waters' preliminary review elsewhere in this issue.

JOHNNY MASUDA'S GRAPHIC IMAGES I
L&Y Electronics
13670 Jefferson Davis Highway
Woodbridge, VA 22191
(703)494-3444

L&Y Electronics is currently the sole outlet for this new graphics utility intended for use with the PRINT SHOP. The author has done an excellent job in designing 128 new graphic images ranging from sports figures, to cartoon characters to a variety of national flags snapping in the breeze. This is a real sleeper! And the price is right at only $9.99. A couple of samples are displayed below.



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ATARI SOFTWARE PROTECTION TECHINQUES
ALPHA SYSTEMS
4435 MAPLEWOOD ROAD
STOW, OH 44224

This book, written by George Morrison, discusses a number of Atari software protection techniques including hidden directories, bad sectoring, hiding protection code, misassigned bad sectors, RON and EPROM cartridges and hardware data-keys. Comes with a supporting disk which provides utilities for hiding disk directories, bad-writing sectors, etc. Priced at $24.95.

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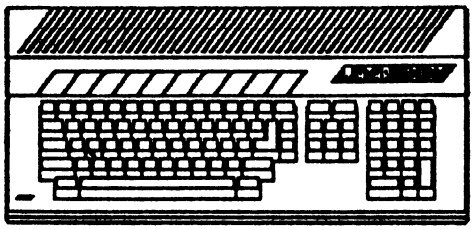

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Word Processors: An Introduction

by Joe Waters

Like many of you, I have spent a good deal of my professional career writing. Since I can type well, I have usually done my own typing. Originally, this was on typewriters, first manual and then electric. About 8 years ago, after going through the umpteenth draft of a 40+ page paper, I discovered a thing called SCRIPT on the company's mainframe. What a wonderful invention! I could sit and type a draft once and then, if there were changes -- there are always changes -- all I had to do was edit the file and print it out again to get a new clean draft. Unfortunately, the draft came out on computer paper, but at least it was much easier to produce a clean copy from which further revisons or changes could be made. Not long afterwards dedicated word processors started making there appearance. At about the same time, ink jet, and then laser, printers showed up as print devices on mainframe computers. These printers cost hundreds of thousands of dollars, but they allowed one to use a general purpose computer to produce good quality typescript output.

I mention this just to give you some perspective on how far the world has come in a very short time. Now, for about the price of what an HP programmable calculator used to cost, you can buy a computer (Atari of course), disk drive, printer, and word processing program. With these ingredients you can produce "letter perfect" documents in your own home easily and quickly.

Let's look briefly at the components of your personal word-processing shop.

The computer. Virtually any personal computer can be used. When someone looks at a finished document, there is no way to tell if it was generated on an Atari or a far more expensive computer or dedicated word processor. In this case, spending more money on a computer will make your editing process faster and, perhaps, easier, but may not have much affect on the look of the finished produt.

The disk drive. For an Atari system, the type of disk drive does not affect the quality of your printed output. The disk will allow you to use some word processors only available in that medium and allows you to store your documents. This is a great convenience, but one drive is as good as another for this purpose.

The printer. This item matters a great deal. Your final output is only as good as your printer can print. If you spend more money in this area, you buy better print quality and/or faster print speed.

The word processing program. This item is also important. It is the key factor in determining how easy or difficult it is for you to produce a finished document.

In this and the next several issues of Current Notes, we will be taking a close look at the various word processing programs (and some of the printers) available for the Atari.

Before beginning that journey, however, I wanted to say a few words about word processors (WP) in general to give you some perspective on what to look for as you evaluate the various programs vying for your money.

Just Give Me the Best!. First of all, there is no "best" word processor. In the IBM PC market, the leading word processing programs have virtually every function you might want in a word processor. The differences are a matter of style. What one person likes and is comfortable with another person may hate. The market can, therefore, support a variety of different word-processing programs. (Not the hundreds currently available. Most of these companies are simply going to disappear.)

In the Atari market, style is important as well, although here, with more limited memory available, some programs provide more or different functions than do others. The increase in functionality, however, always comes at price -- either in dollars or complexity. You will have to decide whether the increased functions are worth the price you have to pay.

What are the minimum number of functions needed in a WP? Consider what a WP does. You provide an "input file" that includes the text you want printed and instructions on how to print that text. The WP reads this input file, formats the text as per the instructions, and sends the results to some output file, normally your printer.

The amount of work a WP has to do depends on the complexity of the formatting instructions which, in turn, depend a great deal on the complexity of your printer.

Daisy-Wheel Printers. If you have a daisy-wheel printer, that is, a letter-quality printer that is essentially the same as having a typewriter, there are only a limited number of things you can do. You can detemine how the printed page will look by setting page margins (left, right, top, and bottom), indicating line spacing (single, double, triple), setting "headers" or "footers" (lines that appear at the top or bottom of each page), and indicating how to treat paragraphs (skip lines, indent, justify text, etc). You should be able to left justify, center, or right justify individual lines. Your only options on word emphasis might be to type each character twice (producing a boldface effect) or to underline characters.

Any word processor ought to be able to provide you with a set of commands to accomplish the above formatting options. With this limited set of options and a letter quality printer, you can produce entirely acceptable results.

Dot Matrix Printers. If you have a near letter quality dot-matrix printer, you can still produce very nice papers but you will now have quite a few more formatting options and thus much more work for your word processing program. Besides boldface and underlining, you may now be able to specify italic characters, subscripts, and superscripts. Most word processors should be able to handle these easily enough.

With dot matrix printers, you can also print your characters twice as wide as normal and even change the font you are using. Now we are into difficult options for a WP. Changing fonts, for example from pica (10 character per inch (cps)) to elite (12 cps) to condensed (17 cpi) or to any of these using a double-width option, requires far more calculations in your WP program to maintain the appropriate margins. Some WP programs may not even let you change fonts within a line. Others will let you change fonts, but also demand that you recalculate the margins. The sign of a good WP is one that lets you change fonts as you desire and still handles all the details of spacing and formatting required to maintain the margins you have set. If you can specify your margins in inches rather than in "characters", so much the better.

Printer Compatibility. Of course, all of these formatting options are worthless if the WP does not work with your particular printer. If you want the printer to underline a phrase, specific codes must be sent to the printer to turn underline on, and then later, to turn it off. These codes are not the same with each printer. Unless the WP provides a file that converts the WP formatting commands into something your printer understands (often referred to as a "printer driver"), the WP formatting commands will be useless and you will not be getting the best use of your printer. If a printer driver is not supplied, is a program provided that allows you to construct one? No? Will the WP allow you to send your own control codes to the printer? No? Find another program. Remember, if your WP can not communicate with your printer, it will do you little good.

The Editor. Once you have determined that the WP you are looking at is compatible with your printer, take a close look at the editor. Most of your interaction with a WP is via the editor. This is what you use to type in your text and then change it as desired.

If you type fast, can the editor keep up with you? An editor that cannot handle your typing speed can lead to lots of frustration. Does it have both an insert (old text is pushed to the right) and an overtype (old text is replaced with new text) mode? Does it allow you to merge text from other files. Can you search for (and replace if desired) any particular section of text?

Every editor ought to be able to give you the standard Atari cursor control movements (up, down, left, right). In addition, can you easily move up or down a page at time? a word at a time? to the top or bottom of the file? Can you move to any particular point in the file?

Atari normally allows you to delete a character or a whole line. Can you easily delete from the cursor to the top or bottom of the file? Can you delete a block of text? Can you delete a single word? a sentence? a paragraph? And finally, if you've deleted something accidently, can you get it back?

Besides straight text, many print tasks require the generation of tabular information. How well does the WP handle tables? Can you set tabs and use these tab settings to control the spacing of columns? Can data be lined up on the right, as well as the left side of a tab mark? Can data be centered on a tab or lined up on a period?

It is easy enough to generate and read text in a document. But how about the formatting commands? Do the key sequences required remind you of the function (for example, Control+C to Center a phrase)? Does the visual reflection of the command on the screen remind you of its function? Can you use the search and replace functions to change formatting commands?

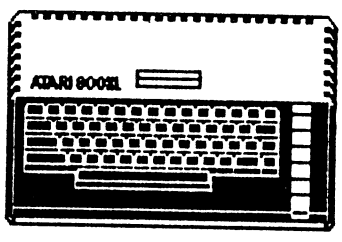
How does the WP interact with DOS? Is it easy to save your file? Can you see your disk directory from within the WP? Can you perform simple DOS funtions like lock, unlock, erase, or format? Does the program work with double as well as single density disks?

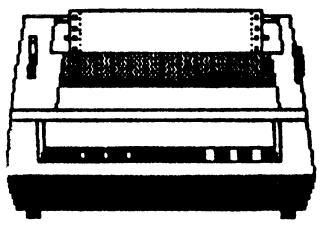
After you've edited for awhile, you will want to see how you are doing. Can you preview the finished product on the screen? How close will that preview reflect the final printed output? Can you send your output to a disk drive as well as a printer? Can you print the document starting at some page other than the first? Can you print only a few pages of the document?

Does the WP have time-saving features? For example, can you easily include commonly used sections of text or formatting commands? Does it calculate a Table of Contents automatically? Can it create an index automatically? Does it format footnotes automatically or do you have to do that?

If you are going to spend a lot of your time using the WP, do not be too influenced by the initial purchase price. The far more significant cost is the time it takes you to master the program and to use it on a regular basis. If you value your time at all, a program that accomplishes its task just 10 percent faster than the competition can recoup any initial cost differential very quickly.

The above items reflect the major things you will want to consider when choosing a word processor. Remember, a word processor can be an excellent investment. Simple systems may have limited capabilities, but the simple system will not cost as much as the more complex ones and are likely to be much easier to learn and to use. If your needs are not demanding, a simple WP may be perfectly adequate. However, if you plan to produce a wide variety of documents and or very lengthly and formal papers (including tables of contents, indexes, footnotes, etc.), then you will do better to take a close look at the more advanced word processors.





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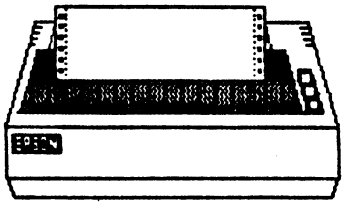
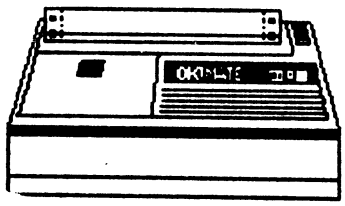


THE PRINT TOOL

Professional RUNOFF for the Atari

by John Barnes



Introduction

PRINT TOOL, a text formatting program developed by Marshall Abrams of the AURA user group, is an unusual piece of software for computer users who face very special requirements. The big companies that Marshall showed it to felt that PRINT TOOL was too speciallized for the mass market. However it suits some of my requirements to a T, and I am glad to have it. The work that Marshall has put into this project deserves some recognition and the design and execution of the product also offer some insights into software design that should be of general interest.

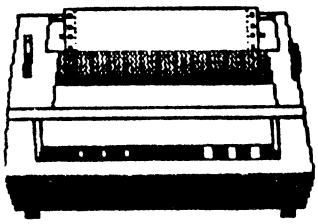
Design Goals

If PRINT TOOL were intended to compete with ATARI-WRITER, Letter Wizard, and others of their ilk, it would not be worth the hassle. No one needs another word processor to write letters or short reports.

Compatability with Other Machines. The program is useful because it emulates RUNOFF, a text formatter that dates back to the days when Teletypes and card punches were the principal input devices for computers. RUNOFF is still widely used on DEC machines and related programs such as TROFF are being developed for UNIX systems. Thus files written for formatting by PRINT TOOL can be formatted on large mainframes and files written for RUNOFF on these machines can be formatted on an ATARI using PRINT TOOL. I will use RUNOFF as a generic name and PRINT TOOL to refer to the Atari implementation.

Portability of Text. Since all of the formatting commands are easily recognized in search strings, the files can be sent to fancy word processors and easily translated. This is no small virtue when one has to move text among many computers and word processors. Since all of the formatting commands are plain old ASCII characters, files prepared for formatting by RUNOFF can be moved from one machine to another easily. There are no "tokens" to cause transmission glitches and the files use the normal record delimiters that ATARI DOS recognizes. RUNOFF cheerfully ignores the "hard carriage returns" that other word processors use to mark paragraphs. People who have had to reformat download files will appreciate this.

Implementation in a High Level Language. PRINT TOOL is an unusual example of a serious program written in BASIC. The run-time version was compiled using the Monarch compiler and one can hope that the source code is adaptable to other machines and other languages. Marshall tells me that there is no space for enhancements in the present version. This may change with new machines or new languages. I think an implementation in ACTION! would be interesting indeed.



Features

PRINT TOOL has certain very powerful features that are simply not available on other ATARI word processors. I will discuss some of the more interesting ones and leave you to find the others in the manual, which runs to about 80 pages.

Table of Contents Generation. PRINT TOOL can be used to generate a table of contents for documents that are organized into chapters and sections. The user must account for this by flagging the beginnings of new chapters and new sections, but PRINT TOOL keeps track of the numbering.

Indexing. The user can also flag terms that should appear in an index of the document and then use PRINT TOOL to determine the page numbers on which the terms will appear. An alphabetically sorted list of index terms can then be generated and attached to the document.

Readable Tokens. All of the formatting commands and other flags are plain vanilla ASCII strings. I regard the absence of non-printing tokens as a positive benefit when I have to move my files to another machine. Even the crudest mechanisms for string searching can easily locate the tokens in order to change them.

Ability to Structure a Document. The ability to structure text into chapters, sections, and paragraphs helps greatly when thoughts must be organized. I usually put an outline of the document into the file and then flesh it out as I go along. Sections of the document can be relocated without the user having to worry about keeping track of them. The printed table of contents provides an instant view of the structure of the document.

Formatting Power. PRINT TOOL and RUNOFF have a lot of power for formatting text. The spacing between paragraphs, the paragraph indentation, and the number of lines to test for prior to a page eject can all be set with one command. These features are very important to document appearance. The user also has lots of flexibility for laying out tables. Margin adjustments in the body of the text are no problem. Space for figures can be preserved in two different ways. Seeing is believing and the documentation has several excellent examples.

Slide Preparation (in Color). PRINT TOOL also offers a mode that allows formatting of small pieces of text into slides on the ATARI screen. The manual has a special section of tips for photographing these slides.

Font Control. The usual fonts that appear on an Epson printer with Graftrax+ are available to the user. A utility program for customizing to other printers is provided.

Documentation. The documentation offers an excellent model for software designers. There is an overview, sev-

eral examples illustrate the flavor of the program, a reference section lists the commands in alphabetical order, appendices cover certain special topics, and the whole thing is nicely indexed. The book is thorough, it is extensive, and it is well organized. This is important because there are very few menus. The examples on the disk are also very valuable.

Run-time Diagnostics. PRINT TOOL provides extensive diagnostics at run time. The screen displays the input text while the formatted text is printing. Error messages on the screen pinpoint problems and an error message file is sent to the user's disk. These provide valuable feedback to help the user correct mistakes in document preparation.

Using PRINT TOOL

File Preparation. The RUNOFF user first prepares a file containing the text to be formatted with the formatting commands embedded in the text.

Any editor that produces ASCII records with an end-of-line record delimiter can be used to prepare text for formatting by RUNOFF. The program text editor for the ATARI MACRO ASSEMBLER package is especially good. TEXT WIZARD and ATARIWRITER with the file output option should also work. The Assembler editor cartridge and the BASIC cartridge can also be used because PRINT TOOL can deal with line numbers at the beginning of a line. I used the ACTION! cartridge for this report, I then made some final changes using the keypad editor on a VAX, and the PRINT TOOL on my Atari 800 was used to format the text for transmission to Current Notes. This adaptability to an open software environment is my strongest reason for preaching about this product.

Text formatting commands for RUNOFF appear with a period preceeding a text string. The period usually appears in the first position on a line, but several commands may be placed on a line.

Other special characters are used as control flags for font control or indexing, but there is a way to allow these characters to represent themselves. Control flags are embedded in the text where they are needed.

The resulting file is written out to a disk. The file must be in variable record length ASCII format (the kind of file that is read into strings in BASIC or copied to the printer from DOS)

Text Formatting. In order to format the text the user must leave his editor and boot up the PRINT TOOL disk. There is an AUTORUN.SYS file that loads the program as an executable image including the runtime library for the Monarch compiler. The program uses a couple of menus to solicit execution options and it then proceeds to format the text to the screen, to the printer or to an output file.

The main source of formatting commands is the disk file described above. The program does, however provide for input from the keyboard, which can be useful in making certain initial settings and in controlling the display of slides. Formatting commands can also be stored as "MACROS" in auxiliary files.

If the user specifies "E:" as the input file commands are taken from the keyboard. The inclusion of a MANUAL command in the text solicits further input from the keyboard until file input resumes as the result of a "GO" command. An "INCLUDE" command in the text allows the user to chain other files into the stream, thus allowing for rather large documents.

Output. The user can get a pretty good idea of his document by using the screen as an output device. The ultimate destination is usually a printer, but formatted output can be stored in a disk file for later use, including uploading to another computer.

Index and TOC Generation. Separate programs are used to generate Tables of Contents or indexes. These programs essentially abstract information as they scan the text. Header Level marks create Table of Contents entries while index flags create Index entries. The latter are then sorted and output as a separate document. Both the TOC and Index functions must calulate page numbers as they scan the text. The documents created by these functions can be printed out separately or they can be chained to the original.

Default and Printer Customization. Another utility is used to provide for customization of the setup defaults and the printer controls.

Problems

Awkwardness of use is the main problem with PRINT TOOL. This is less of a factor with RUNOFF because mainframes are much faster and more convenient to use. The program is awkward to use on an Atari because it requires a separate text editor, which can lead to a good deal of flipping back and forth. Some program editors that one can use for text entry do not provide word wrap, which makes text entry rather tedious. The boot and load process is fairly slow as is the program execution. Even on the screen the text does not rip right along.

The above flaws lead to a lack of immediacy, so that this product should not be used for routine report preparation. I sometimes use Text Wizard to make the first cut and then use PRINT TOOL or RUNOFF to make the final print.

My copy of PRINT TOOL flatly refuses to recognize the existence of additional disk drives. Marshall assures me that this is a bug. I would also like to see a more open architecture so that the program does not have to be boot loaded. This would allow me to move from an editor to the text formatter much more easily.

The extra features in PRINT TOOL sometimes get in the way when RUNOFF operates on the file on an another machine. The superflous commands are easily eliminated by string searching in the mainframe's text editor. The .MANUAL command is one example and the numeric argument of the .JUSTIFY command is another. Software designers

should keep their designs bounded to comply with the mainframe standard when building a product like this one. Combining a slide making program and a text formatting program created some of the problems that exist here.

The obvious presence of the format commands in the text gives rise to a rather jumbled looking text, which does not provide a very good impression of the finished product.

Conclusion

PRINT TOOL for the Atari fills a very specialized niche in the software world. People who want the features it provides will not find anything else like it. I suspect that there are only a few Atari users who would need to use it regularly, but would-be software authors can surely benefit from the attention to detail and emphasis on professional documentation that went into this program. I think the overall concept should be carried forward by implementing the program in a compilable structured language.

If Current Notes readers exhibit enough interest Marshall will make marketing arrangements, possibly through the AURA user group. I am not aware of a firm price. The distribution disk is two sided, and the manual is rather bulky, so that production is obviously ex[illegible]nsive.

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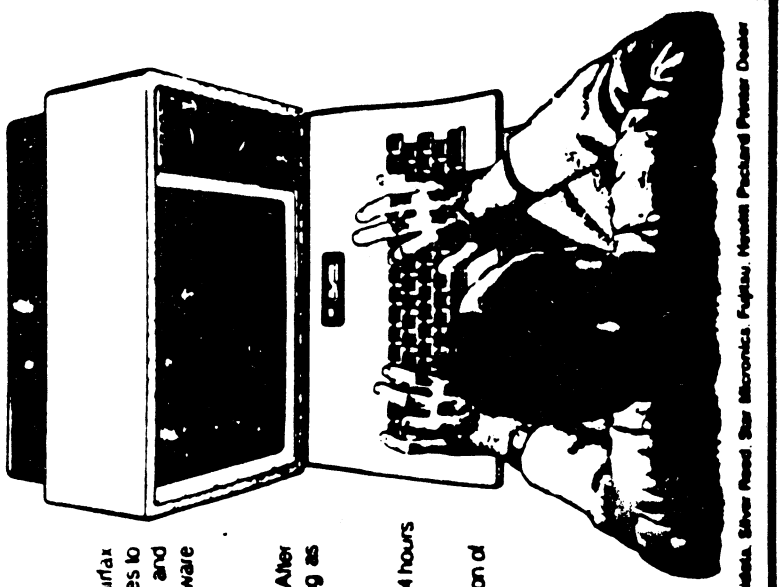

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PaperClip

Reviewed by Joe Waters

After much pre-release publicity and fanfare coupled with rave reviews from ANTIC, I was looking forward with eager anticipation to the arrival of the new word processor from Batteries Included, **PaperClip**. I had hopes of doing this issue of Current Notes on an Atari 130XE using PaperClip. Afterall, the advertising had claimed that PaperClip could format two columns and print both in a single pass -- an important point for printers that can not move the page backwards.

I have worked with PaperClip for many hours now and this issue of Current Notes is not being produced with PaperClip. I have found some very interesting and useful features in PaperClip. However, other elements of the package have led to enormous frustration. There were several times where I wanted to simply pull the disk out of the drive and never touch the program again.

Let me retrace for you the problems I have encountered. First of all, I read the entire manual from front to back. About a third of the way through, I noticed that there were quite a few minor editing errors. I then went back to the beginning and checked all the errors as I found them and later sent a copy of these pages to BI.

Start at Page 10? Most were minor problems, but some were definite mistakes in the examples provided. One that proved particularly troublesome was the example of how to start a page at some number other than one. Reading the content, I could figure out that the example was wrong. Everyone, however, may not be able to spot the problem so easily. In fact I received a call from a new PaperClip owner who said he had just spent 5 hours trying to get PaperClip to start numbering pages at a number other than 1. He was convinced that it couldn't do it. Since I had already done that in my experiments, I assured him it could and gave him a sample text file that did it.

Page Size? Let me give another example of "manual-induced" confusion. On page 50, the manual explains how to print text on legal size (8.5 x 14 inch) paper. It says enter CONTROL+Z followed by L followed by 84 (6 lines/inch times 14 inches is 84 lines).

This sounded easy enough, so I tried it. It didn't work. In fact I got very strange results since, as I later discovered, the sequence CONTROL+Z followed by "L" is not the command for page size but rather the command to set the second column for a two-column page.

According to the appendix the appropriate command for page size is CONTOL+S followed by the number of lines. So I tried that. This time I used the print preview feature to save paper. No effect. No matter how I changed the number of lines, it still formatted up to line 60 of the text. Rereading again the relevant section in the manual, I noted the sentence "Don't forget to change your page margins to match your new page length." Page margins? What does the left or right margin have to do with length? The top margin shouldn't matter. Ah ha! The bottom margin. So I changed the bottom margin and discovered that both the bottom margin and the page size had to be changed to print to a different size page.

Print Preview. The print preview feature of PaperClip mentioned above is quite good. By hitting CONTROL+SHIFT plus the Atari Logo key, you can preview what your document will look like. The screen splits with four lines for your document and the rest devoted to what your document will look like when formatted. You can scroll in this document window: up, down, left, and right. Note, however, that if you use boldface or italics or underline or change fonts, you will not be able to see the effect in the preview window. I also noticed that in print preview, where the top status line shows your current column and line position, the line position is actually one line less than what is stated. In addition, the total number of lines it allows you to move your cursor over are three more than the page size you have set.

Typing. Forget minor manual problems for now. Just start typing in text. But be careful. You have to type slow enough for PaperClip to keep up. I am not as fast as I used to be, but 60 words a minute is fairly easy to do. Unfortnately, when I tried to type at that speed, I found myself having to go back over almost every sentence to insert missing characters. Speed wasn't such a problem at the beginning, but as the size of the document grew and, in particular, while editing if I tried to insert a sentence in the middle somewhere, PaperClip had a difficult time trying to keep up. If you have to go back over every sentence to insert characters that had not been picked up as you typed, this becomes a real nuisance. In fact, this was one of the major problems I had had with AtariWriter.

At other points in the program I have also noticed a certain slowness in response. For example, when it says "hit START", I do so and often find that nothing has happened and I have to hit START again. There is also a definite difference in speed between inserting text and deleting text. Try this experiment. Hold down a key and see how long it takes to fill up four screen lines (should be about 8 seconds). Now try to delete these characters using either the backspace key or the CONTROL+DELETE keys. It takes about three times longer to delete characters than it does to insert them. In the normal editing process, where you add and delete characters, the slowness of the deleting is certainly perceptible and irritating.

Printer Drivers. To work effectively with my printer, the popular Panasonic 1091, I needed a printer driver. PaperClip has no driver for the 1091. However, the Panasonic is supposed to be Epson compatible. PaperClip has 6 drivers for the Epsons: FX80, FX80ALT, RX80, RX80BS, MX80, MX80III. Which one to use? Got me. I ruled out the MX versions. Tried the FX80. It didn't work right. Next tried the RX80. That was much closer so I started testing with the RX80 driver.

Standard Fonts. PaperClip has four fonts: Font 0 (10 characters/inch - Pica), Font 2 (12 characters/inch - Elite), Font 5 (15 characters/inch), and Font 8 (Optional font). On the RX80, 10 and 12 were fine. The 15 was really the 17 characters/inch provided by condensed print and experimentation determined that the Optional font was

set to double width Pica. None of this is documented anywhere, you find out by trial and error on paper or using print-preview or by examining the actual codes set in the printer driver but more on that later. I tested each font on a simple paragraph; they all worked fine.

But what if you want to emphasize some characters more than others? PaperClip provides four commands to do just that: **Boldface**, *Italics*, Underline and Subscript or Superscript. I tried all of these options in all the fonts. Except for condensed print, they all worked. In the case of condensed print, the boldface switched the characters to Pica and messed up the margins completely. On examining the RX80 printer driver, I discovered that the emphasis mode was being used for boldface. This mode does not work in condensed print but rather makes the substitution I mentioned above. That was too bad. This newsletter, after all, is printed in condensed print and it does use **boldface** characters. (This newsletter, by the way, is printed on a Panasonic 1092 printer whose print output is essentially identical to that of the 1091.)

It seemed, therefore, that I would have to make my own printer driver. Instead of using the emphasis mode for boldface, I wanted to use double-strike mode which worked fine in all fonts. In addition, I wanted the optional font to be propotional print. The manual said I had four commands that I could define on my own. I would use two to turn emphasis on and off and the other two to turn double-width characters on and off.

Creating a Printer Driver. PaperClip comes with a program that allows you to make a custom printer driver. To use it, you exit PaperClip, put in a DOS disk, reboot your computer and run the program. A nuisance, but what the heck, how often do you need to make a printer driver?

Running the Printer Configuration Utility, the first screen asks you whether you wish to alter an existing printer configuration file. If you respond "Y", it asks you for a filename (it assumes, of course, that you wrote the filename down ahead of time). It then starts asking you a series of questions about your printer. It shows the current setting (which will be from 1 to 6 numbers) in one box and has another box for you to enter a different setting. Although the instructions never mention this, if you simply hit RETURN, the old setting remains valid. Unfortunately, if the setting is one where 6 numbers are allowed, you must hit the RETURN key 6 times to go on to the next setting. You cannot skip options nor can you go backwards. Just to get to the first "User defined command" you must press the RETURN key 151 times. The programmer writing this utility saved himself some time so that all users would be able to waste their time. It would have been no big deal to provide a menu of the various options, allow me to select one, make whatever changes I wanted and then select another or exit at that point.

However, I persisted. I defined the first two user defined commands to turn emphasis on and off and the next two to turn double width on and off. I also noticed that the font commands, such as pica, set the pitch and then turned off double width and compressed printing. I changed those so all they did was turn on pica. Having defined my "customized" printer driver, I booted PaperClip up again and loaded my special driver. I tried it out on all four fonts. The user commands did not work. But why not? They should have. I booted up DOS and checked the codes. They were correct. I experimented with various combinations. I tried user defined commands with the same codes that worked elsewhere, i.e. italics and underline. The underline didn't work and the italics did -- sort of. The problem was that more things were being changed to italics than I had asked for. I discovered that if I put text on individual lines, the italics was fine (still no underline). With more experimentation, I discovered that any text that appeared on a formatted line with an italicized word would also become italics. Similarly, if the end italics code also appeared on that line then nothing would be italicized. The same was true for the boldface (emphasis) and double-width codes. That's why it looked originally like nothing was happening.

Perhaps my printer couldn't do it! I wrote a little BASIC program trying to print normal text, **emphasized text**, normal text, and then **double-width text** all on the same line. The printer had no problem doing it. It's PaperClip that has the problem. If I use the PaperClip definition for italics, it works fine. If I used the identical codes in the user-defined variables to accomplish the same task, it doesn't work.

So why worry about the printer driver? I'll just send the codes to the printer in the text like most users have been doing with AtariWriter. Sorry. I can see no way -- and the manual doesn't mention a way -- to imbed printer codes in PaperClip text.

Mixing Fonts. If I could be content with keeping each paragraph to only one font and just using underline, boldface and italics to highlight my text, wouldn't PaperClip be just fine? Well, yes and no. If the default margins for each font (you specify these in the printer driver) are fine, then your text will be fine. What are the default margins? You've got no way of finding out without leaving PaperClip, running the printer driver program and examining the specifications there or just experimenting with your printer. By the way, I should also mention that if you have several variants of a printer driver that you want to use (RX80 and RX80BS for example), there is no way to determine which printer driver is loaded. You can pick the one you want, load it into PaperClip and then save it with PaperClip so that becomes the default driver every time PaperClip boots up. However, there is no indication on the disk or within PaperClip of which driver is being used as the default.

I mentioned margins above because every time you change fonts, the margins specified for that font in the printer driver are set. So if your driver normally gives you a 1-inch left and right margin and you want to change that to 8/10 of an inch, you would use the PaperClip margin commands to specify a left margin of 8 characters (for Pica) and a right margin of 77 characters. The trouble is, if you want to include a paragraph using elite, you would have to respecify the left and right margins for elite and then do it again when you go back to pica. In

fact, every single time you changed the font, you would have to recalculate the margin settings.

Block Moves: I do not like the implementation of block moves in PaperClip. To move a block, you set your cursor at the beginning of the block to mark it, move to the end of then block and mark it. Now, you are asked whether you want to Copy, Move or Delete this block. If you hit anything other than the C, M, or D keys, your marked section is immediately unmarked and you have to repeat the process. If you choose to Copy the section, you enter C and then move to where you want the copy placed and press RETURN. The section is copied there. Unfortunately, the markings disappear. If you want another copy, you must repeat the whole process.

Cut and Paste. There is a cut and paste function that allows multiple entries, but it only works on whole lines in your input file. You cannot, for example, cut one sentence from a paragraph and move it elsewhere. Move the cursor to the line you want deleted and press SHIFT DELETE. The line disappears and the paste buffer counter goes up one. Delete three more lines and the paste buffer now has four lines. You can move anywhere and hit CONTROL+SHIFT P and the paste buffer is pasted in (as many times as you want). To clear the paste buffer, you press CONTROL+SHIFT DELETE followed by RETURN. Note, however, that this last sequence will only work if you are not at the end of your file. In that case, all you get is extra carriage returns; the paste buffer remains full.

Cursor Movement. The cursor keys move you up, down, left, and right with one exception. If you move into a line that has nothing but a carriage return on the far left, you have no way of getting directly to that carriage return. Up and down moves you that direction in your current column. Left moves you to the far right of the line above, while right moves you to the far left of the line below. If the line has even a single character before the carriage return, left will move you immediately to the carriage return.

Merging Files. Although PaperClip says you can place copy from another file "into any part of the file on which you are currently working", it does not insert the new text, it overwrites the old.

DOS Commands. One of the PaperClip options allows you to execute several DOS commands. You can erase, rename, protect, or unprotect files and format disks. You cannot, however, look at your directory. That is available through another technique. You can list a directory in window 2 and then choose the DOS option. However, you cannot observe the effect of any of your DOS actions without leaving the DOS option and reading the directory into the window again.

Word Count. PaperClip will count the words in your document. Unfortunately, it doesn't count very well. It does not include any words that are next to a carriage return. So if you had a 10-line poem with each line having 5 words, PaperClip would tell you your document had 40 rather than 50 words.

Indent and Outdent. PaperClip has a nice paragraph command for indenting. However, it cannot do the opposite, i.e. let the first line of a paragraph start at the left margin and indent every other line. This format, illustrated here, is useful for numbered lists of items.

Tabs. Tabular data were always a problem in Atari-Writer with only a 40 column input screen. PaperClip has alleviated this problem a good deal by providing a tab capability. You define tabs by specifying the column positions you want each tab mark to be set at. For example ^ZT1,5,15,30,60 would set tab stops at columns 5, 15, 30, and 60. (By the way, this is measured from the edge of your paper, not from your left column. Thus if your left margin is set at 10, the tab stop at column 5 would have no effect. I find this confusing; it would have been better if tabs started at your left margin setting. A tab of 5 would then mean the 5th character in on your printed page.) You can have two separate tab map settings at any one time (indictated by T1 or T2). When you want to input data in tabular format, you use ^A to insert a tab. Although the example in the manual implies you can follow the tab request with data, usually you cannot. You see, if you are using tab settings no. 1, you would request a tab with ^A1 while tab settings no. 2 would require ^A2. Therefore, tabbing to a column and trying to print the number 125 just won't work. PaperClip gets confused with the 1 following the A and treats it as the tab no. 1 indicator. Therefore, if you want to put numbers in your columns, you have to place a space after the ^A print-tab marker. The net result? If you want a column with the left edge at position 20, you would have to set your tab at position 19 to allow for the extra blank space. It would be better if PaperClip would abandon the option of having two separate tab maps. One is sufficient. Then you don't need to use "1" or "2" to indicate which map your are using and you would be able to tab directly to the desired column and insert either letters or numbers.

Windows. PaperClip allows you to split the screen into two distinct windows. (You can vary the size of each window using the PaperClip OPTIONS command.) The second window is used to display the disk directory, to show you the print-preview, and to edit a second file. With two files in the windows, you can move text from one file to the other relatively easily. You can delete either window and the remaining window then takes up the whole screen.

Windows are a nice feature. The only problem I encountered was when I attempted to delete window 2 only to see the file I was working on in window 1 disappear. If you haven't saved recently, this can be upsetting. But why does it happen? It doesn't happen all the time. Well, I did some more experimenting and I think I found the culprit. When you press SELECT, the cursor moves from one window to the other. This is how you move between windows. So, if you are in window 1, press SELECT, the cursor goes to window 2, press CONTROL SHIFT D to delete the window, and, usually, window 2 disappears. The problem is with SELECT. If you just press the SELECT key quickly, the cursor jumps to the other window. However, if you hold your finger on the select key too long, like half a second, the cursor jumps to the opposite window,

and remains there as long as you have your finger on SELECT. Look at the screen. It is sitting right in the window you wanted it to be it. But, once you remove your finger from SELECT, it jumps immediately right back to the window it came from. Now when you continue along with your delete key strokes, --- disaster. There is a bit of a clue. Normally the cursor is flashing. If you are holding your finger on SELECT too long, it stops flashing and just sits there staring at you. When you release SELECT, zip, it's gone. Of course, you may lose a few files before you spot this clue.

Another problem I ran into with windows was an odd one. From the second window, I entered CONTOL+SHIFT W (for write) to save the file. PaperClip comes back with the previously used filename. If that is OK, you just press RETURN and the file is written to disk. What was happening, and I didn't notice until I found that the file I was saving somehow mysteriously got zapped, was that an error code was returned (133? 138? I forget). But the file wasn't saved. When I noticed this, I experimented some more. Every time I tried saving, the same thing would happen: the first CONTROL+SHIFT W would produce an error, but if I immediately tried the same keystrokes again, the file was saved successfully. I couldn't figure it out. What's more. When I came back at a later date, I also couldn't reproduce the error again.

Double Column Printing. PaperClip's ability to print two columns in a single pass is a unique feature that allows owners of printers that cannot advance the page backwards to easily implement double-column printing. Now, if only it worked.... I tried the double column printing in various fonts. Sometimes, it works just fine. At other times, I found that the print preview would only show me about 20 of the 60 lines on a page and that the second column was terribly messed up. Lines in the second column would be repeated two or three times. I sent this to the printer, and the printed output looked just like the print preview. Once, I found text from the previous file I was working on mixed with the text from the current file I had loaded. I must confess, that I simply did not have the time to do all the investigative work to explain why it worked sometime and why not at others.

Good Features. I have talked about many of the problems I have had with PaperClip. Let me also mention some of the successes. I tried the **mail merge feature**. It worked beautifully. I make a form letter that would take various inputs from a second file (addressee, internal data, etc). I was able to use PaperClip to construct the data file (and look at the datafile and the form letter at the same time because of the split windows). Of course, if I wanted to send out five letters, that meant duplicating the basic form letter five times which didn't seem to save much time or effort. But there was, I discovered, another way. By using the **batch facilities** of PaperClip, I could construct a file that indicated the data file to use and then simply called my one form letter five times. Worked like a charm!

PaperClip also has a **macro facility**. If there are common expressions you normally use in your writing (return address, signature, company name, common formatting parameters, etc.), you can put them in what are called macros. It was extremely easy to define macros in a file, load them, and execute them. To execute a macro, you just push START and then whatever key you had used to define your macro. For example, START+1 might print your letterhead or return address. START+a might print Albert's name and address for the beginning of your letter, while START+B could be used for Bill's address. This was a nice time-saving feature that worked well.

PaperClip allows you to have up to three **headers and/or footers** in your document. They were not too difficult to define and they worked exactly as advertised. In fact, you could use the macro facility to predefine some common headers/footers.

Protection. The PaperClip disk is not copy protected. You can make as many copies as you like. All of them will work perfectly fine -- if you have the PaperClip key in joystick port no. 2. Without the key, nothing works. I normally find protection schemes irritating. However, this one doesn't bother me at all. If you were using AtariWriter or OSS's Writer's Tool, you would need to put the cartridge in the machine. Using PaperClip, you put the key in the machine. Of course, if you lose the key, you have a problem just as you would if you lost the AtariWriter cartridge. I do particularly like the ability to move PaperClip, your "default" printer driver, and any defined macros onto a separate disk. You can then use this disk for your writing. Put the disk in, boot up, and PaperClip is there as well as all the files you are working on. It eliminates the need for a lot of disk swapping.

Summary. I was disappointed with PaperClip. I think part of the problem was the early reviews that said this was the greatest product ever. It built up false expectations. I have the impression that early "beta testers" didn't put the product through too many tests. That's too bad. The reason for testing is to find bugs and errors and get them fixed before a product is released to the public. PaperClip comes on a disk. I expect upgrades will become available and the product will improve as it is fine-tuned through time. The company certainly has a good reputation and has released some very fine products for the Atari.

How about buying the current version? Depends on what you are doing. If you have a standard printer and will be doing typewriter-style output, that is, everything in pica, or elite, just as in normal home or business correspondence, you may run into no problems whatsoever. In fact, the advanced features of PaperClip may prove very appealing. If you are doing lengthy documents, the batch facilities and the macros can be particularly useful. And remember, that BI will soon be introducing the 80-column cartridge to work with PaperClip. That may be enough to sway your opinion one way or the other.

Okidata Microline 92 Printer

Reviewed by Roland Gabeler

First, I must admit that I am not an expert on this or any other printer. This review is to familiarize you with a few elements of my printer, and to break the ice in hopes everyone will write a short review on their printer for future issues of Current Notes.

My Okidata was purchased on the recommendation of a friend, a member of the Greater Richmond Atari Computer Enthusiasts (GRACE). Tom had purchased many Okidata printers for an electronics manufacturer near Richmond and purchased my Oki for me a couple of years ago. After helping me install mine, Tom bought one to replace his printer about two weeks later.

Installation was a disaster. I had an Atari 1200 at the time and promptly purchased an entire Atari "communications" kit to obtain the rare 850 interface. This piece of hardware was required at the time to hook up a non-Atari printer. After purchasing a connector cable and setting the "dip" switches under the printer cover ..... nothing happened. We read the books again .... and again, rewired the connecting cable, reset the dip switches, typed one command, then another ..... nothing. After seven hours of trying to make the printer run, Tom left for Richmond completely baffled. Five minutes after he departed, on my last desperate attempt, the Oki printed "Hello Tom". Now, you probably presume I will explain why it didn't work, but I don't know, and neither does Tom. I have told this embarrasing story to humor those of you who have suffered the same type of "hardware humiliation". The Okidata has performed flawlessly (as has Tom's) ever since that day.

Now, lets talk about the printer's use in every day Atari computer applications. I have used the Oki with **Atariwriter** ever since it was introduced. I realize there is now a printer driver for the Atariwriter-Okidata but it really is not required. You simply enter Control O and the decimal code for the function and the Oki will print in Correspondence "Letter" Quality, Data "Draft" Quality, Half Dot "Enhanced" Quality, Half Dot "emphasized" Quality, Underlining and Double Width letters. All these features are available in 10, 12 and 17 characters per inch (CPI) except for correspondence at 17 cpi.

Of course you can do several other functions related to skipping lines, spacing for forms, Superscripts and Subscripts, Margins, Tabs, Etc. This printer will also allow you to design and print your own characters. However, many of us will use our printers to dump disk directories and minor word processing via a program like **Atariwriter**. The Draft and Correspondence Quality in 10 and 12 pitch are what you'll use most of the time.

The Oki 92 is also fully graphics capable but the graphics are not compatable with the Epson. Broderbund's **Print Shop** program works very well, but many graphics dump programs and special font sets for fancy lettering do not run on the Oki.

The printer uses a matrix (9 wire) printhead to form letters. The printer has five controls and three light emiting diodes (red) on the front of the cabinet, a platten rolling handle on one side. This unit uses 9 1/2" wide continuous fed (pinfeed) paper as well as a platten that accomodates single sheets. It runs data quality at 160 characters per second (cps), and correspondence quality at 40 cps.

Whereas many new printers for home computers are light to moderate duty, for "home" use, the Okidata 92 was designed as a heavy duty "office" quality machine. I paid about $500 for my Oki, but you can get one now for about $359. But, if you want one, act quickly, for Okidata is reported to be replacing this model with a lighter duty machine. I recommend this printer as well worth the money for ease of use and enduring quality. If you are planning to use your printer for home use now, but may wish to use it for heavy office use later, you should consider this printer as one of the best.

If that future use is highly unlikely, a lighter duty home use machine is less costly. The June issue of Consumers Reports has a good report on printers worthy of your reading before making a purchase decision. The **Okidata Microline 92** is not to be confused with the color **Okimate 10**, as there is considerable difference in intended use and product durability. The **Okimate 10** is a light duty home machine with a thermal transfer matrix head.

One last point, although the Oki looks like it can use a normal typewriter ribbon, you should never use a typewriter ribbon on a matrix printhead printer. Many typewriter ribbons are cotton and nylon and are designed for a golfball, daisywheel, thimble style, typebar, etc. They are not designed to allow the wires composing the matrix printhead to fire against them. They may shred and could ruin your printhead. This is not to say you have to buy your printer manufacturer's ribbons, but if you have a matrix printhead, make sure you buy ribbons designed for use on matrix printers. Ask your dealer before you purchase a ribbon.

This is a good printer and will undoubtedly last forever. However, there are more versatile printers with great graphics capabilities available on todays market that did not exist when I bought my Oki. I suggest you consider those printers a better buy. They are noted in the Consumer's Report article.

If you are not in a hurry to buy a printer and can wait until the fall, a new generation of printers with 27 wire matrix heads are rumored to be in the offing. These new printers will have spectacular graphics capabilities. If you have an Oki 92 and/or wish to discuss this printer, feel free to call me at (703) 620-9142 in Reston, Virginia. Good luck in finding the right printer for your use.

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CPM
Capital Pro Micro-Users Group

June Meeting: The next meeting is scheduled for July 23, 1985, at 6:30 p.m. (the fourth Tuesday of the month). At the meeting on June 25, the new Atari computers were discussed as well as conducting a demonstration of the new 520ST. Note, there is no meeting scheduled for August. The next scheduled meeting, after July, is on September 24, 1985.

Bulletin Board System. The Bulletin Board System is operational with on-line member access planned to average 20 hours per day. Passwords are required. Remember that we are still in the Beta-testing stage. Frank Huband is the permanent SYS/OP. Messages as well as club news are handled by the board. If you desire to contact club officers between meetings, please leave your message on the board.

The basic commands necessary to navigate around the Board are listed below for your guidance when first using the system.

Capital letters located on command line:

C = Exit to CP/M	E = Enter message
F = List subject files	G = Goodbye (non-cp/m mode)
K = Kill message	R = Read message
S = Quick summary	N = Read New message

Small letters on command line:

b = Retype bulletins	m = Show status of messages
p = Change password	t = toggle bell prompt
u = List user file	w = Retype welcome
x = Expert user mode	

Typing a + sign after a command permits all subsequent files to be reviewed. For example, when using the Read command (R), you are asked the message number to start with. If you wish to read #10 as well as all files after, type: "10+". Commands may be strung together, separated by semicolons. For example "R;123" retrieves message number 123.

As shown above, type: C to go to cp/m mode. Once in cp/m mode, files can be downloaded or uploaded to this RBBS. The procedures/protocols are as follows:

-To DOWNLOAD a cp/m file from drive A> the command syntax is: XMODEM S FILENAME.EXT

-To DOWNLOAD from any other drive, return to drive A> and type: XMODEM S DRIVE # FILENAME.EXT. For example, A> XMODEM S B:NSWEEP.OBJ

-To UPLOAD a file, at the A> prompt, type: XMODEM R FILENAME.EXT. This alerts the system that you are about to send a file. Then go to the command line in your terminal program and insert the appropriate commands.

-To logoff from this RBBS while in CP/M mode, type: BYE

-Note, at present once in cp/m mode you cannot return to the message area without logging off the system and then redialing. This shortcoming, as well as others, will be corrected over the next few months.

Library Disks. Owing to an unusually heavy business work load this past month, we are unable to provide a complete condensed listing of all major programs in the CPM library as promised. This will be supplied in the next edition of Current Notes.

Atari ST Purchase. All members should have received notification of the special ST offer made by Atari to this user group. If for some reason you did not receive the information, notify one of the club officers to determine the reason.

-- Bob Kelly, President

W.A.C.U.G.
Woodbridge Atari Computer Users Group

Meeting Room. I'm pleased to report that the Prince William County Library Board has again granted us permission to use the Community Room at the Potomac Branch for our monthly meetings during the forthcoming twelve months. Meetings will normally be scheduled between the hours of 7 PM and 10 PM on the third Tuesday of the month. Exceptions to the third Tuesday rule are September 24th, November 26th and March 17th.

Coming Events. July's meeting will be on the evening of Tuesday the 16th. We'll have one of the new 520ST's on display, assuming Atari promptly ships units ordered by several of our members who took advantage of their users' group offer. Bob Danson of the National Capitol Atari Users's Group will be on hand to do a demo for us. We'll also be demonstrating a number of different printers provided by L&Y Electronics.

What's in the offing for August? Wouldn't it be nice if there was some new software available for the XE and ST lines by that time? ATARIWRITER PLUS? An expanded SynFile+? A new LOTUS 1-2-3 look-a-like? Whatever? Let's hope so!

-- Jack Holtzhauer, President

NOVATARI
Northern Virginia Atari Users Group

Meetings. The June meeting featured our own Marvin Bleiberg demonstrating the use of a Smith-Corona typewriter as a letter quality printer, and Mike Barnes from "XLENT SOFTWARE" discussing dot matrix printers. Our July meeting is scheduled to present a return of Mike Barnes to discuss printer utilities, such as Page Designer, Megafont II, and Typesetter. Richard Rognlie and Randy Dellinger (authors of Megafont II) will provide technical support. Also appearing at the July meeting will be the 520ST. This will be the first opportunity for most

of us to see the ST. The August meeting will feature the ST and the languages supplied with it. In September, with the start of the school year, our featured program will cover word processors available for the Atari.

-- Dave Meyer, Program Chairman

Seminars. Our seminar experience in June was dismal. Not enough people signed up to make any of the classes go. So, we will try a new tactic. Summer is a time for vacations anyway. The available courses are listed below. You can register any time this summer or at meetings. We will begin scheduling courses that have enough interest in September. Most seminars will be taught at Nottoway Park Community Center in Vienna. Seminars will be open to the public and cost $5/hour. Any member of NOVATARI or any of the other clubs in WAACE may attend seminars for half price. Thus a one-day seminar costs $5 and a two-day seminar $10. We need at least 8 participants for a course. Call Donna Yarbrough (703-255-3967) to register or offer suggestions for new courses. 100-level courses are one evening, all others are two evenings.

101: Introduction to the Atari
102: Disk Drives and Disk Operating Systems
110: How to Maintain Your Hardware
201: Word Processing on the Atari
211: Spreadsheets on the Atari
221: Introduction to Databases
301: An Introduction to Atari Basic
311: LOGO Graphics for Preschoolers
321: Introduction to ACTION!
331: Introduction to Assembly Language
341: Introduction to FORTH

TELECOM SIG. The group got off to a great start in June with about two dozen people in attendance. Next meeting is scheduled for 6:00 to 7:00 during the July Novatari meeting.

New Library Disks. We have added quite a few disks to the library for this month. Two new fantastic music disks. No. 3 (JAZZ) has an AMS II player and some great songs downloaded from CompuServe. No. 4 (BASIC MUSIC) has some examples (intermediate to advanced) of how to write music (and graphics) programs in BASIC. Thanks to Ed Seward, we have four new language disks for the Action! programmer. A new telecom disk features AMODEM 7 and will run on using the 1030 as well as the 850 interface. A complete relational database management system that you can use in creating your own applications is provided in Utility Disk No. 4. We have also included Tim Kilby's **Graphics Trilogy** under the utility disks. This is a shareware product. If you like the program, then you pay the author. Also be sure to check out all the new additions to NPX.

-- Joe Waters, President

NOVATARI DISK LIBRARY

Order disks from the NOVATARI librarian. Price for WAACE members (i.e. anyone who subscribes to Current Notes) is $3.00/disk plus $1.00 for postage and handling for every 3 disks. If you are not a member of WAACE, cost is a flat $5/disk (includes postage and handling.) Send checks, payable to NOVATARI, to M. Evan Brooks, 4008 Patricia Street, Annandale, VA 22003.

Public Domain Library

GAME DISKS:
1-Text Adventures
2-Gambling Games
3-Simulations
4-Maze Games
5-Parlor Games
6-Graphics Games
7-ACTION! Games
‡8-Arcade Look-a-Likes

MUSIC DISKS:
1-TV/Movies (AMS I)
2-Rock 'N Roll (AMS I)
‡3-Jazz (AMS II)
‡4-BASIC Music Programs

EDUCATION DISKS:
1-Mathematics

TELECOM DISKS:
1-850 Interface Programs
2-835/1030 Modem Programs
3-MPP Modems
‡4-AMODEM V.7 (850 or 1030)

UTILITY DISKS:
1-Miscellaneous Utilities
2-Printer Utilities
3-ATARI DOS 2.5
‡4-Relational Database Management Sys
#5-Graphics Trilogy (by Tim Kilby)

LANGUAGE DISKS:
1-fig-FORTH Version 1.1
2-ACTION! Games
‡3-ACTION! Graphics Demos
‡4-ACTION! Utility Programs
‡5-ACTION! Modules #1
‡6-ACTION! Modules #2

NOVATARI Program Exchange

VIZPICS ($3) Jim Stevenson. Collection of pictures (S1:Dark Crystals, S2:Star Trek) generated by Visualizer.

WORD BUILDER ($7) Joe Waters. Vocabulary-building game with 9 100-word dictionaries (incl. grades 2-8). Includes database program for updating old dictionaries.

UNDELETER ($3) Jon Smith. A menu-driven utility that allows you to recover accidently deleted disk files. Provides catalog of deleted as well as saved files.

‡**WEEKLY SCHEDULE** ($5) Jon Smith. Let's you schedule weekly activities in 15 minute increments and print out your schedule.

‡**MATH GAME** ($5) Lawrence Jones. Machine language educational math game (addition & subtraction). Includes complete documented source code.

‡**PRINT TOOL** ($20) Marshall Abrams. Word processor similar to RUNOFF. Requires separate editor.

‡**DANDY** ($5) J. Palevich. 1-4 player arcade game. Includes dungeon editor to create your own levels.

‡**DEEP BLUE C** ($8) J. Palevich. Subset of Small C. C is becoming language of choice for programmers because of its portability. Documentation on disk.

‡**DEEP BLUE SECRETS** ($8) J. Palevich. Source code to Deep Blue C. Documentation on disk.

‡**CHAMELEON** V 4.2 ($6) J. Palevich. A multi-terminal emulator including GLASS TTY, VT-52, VT-52XL, ADM-3A, IBM 3101. Documentation on disk.

‡ New this month.
# Shareware (pay author additional fee if you like program)

The W.A.A.C.E. HOTLINE

Listed on this page is a new feature of Current Notes -- the WAACE HOTLINE. The individuals below have some measure of competence in the hardware or software indicated -- they may not all be experts but they have managed to get everything working. If you are having trouble, just give a call to somebody who might be able to help you out. Please -- no calls after 10:00 p.m. If you would like to add your name to this list, either to a category already here or to a new one you feel should be represented, call Georgia Weatherhead (703) 938-4829.

Disk Drives

PERCOM Jack Liedl (273-4256), Dale Radtke (569-8795), Greg Black (938-0748), Gary Purington (476-8391), Cliff Trump (323-7184)
1050 Ron Peters (780-0963)
INDUS Greg Black (938-0748), Dale Radtke (569-8795)
ASTRA Dale Radtke (569-8795), David Lankford (938-6743)
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Printers

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ATARI 1025 Dale Radtke (569-8795)
ATARI 825 Frank Budelman (750-0079)
EPSON Dick Knisely (476-0529)
MANNESMAN TALLY Duke Wheeler (281-6653), Gary Purinton (476-8391), Cliff Trump (323-7185)
OKIMATE 10 Mike Barry (777-3064)
OKIDATA Roland Gabeler (620-9142)
PANASONIC Dennis McCormick (430-9552), Terry White (849-1725)
PROWRITER Greg Black (938-0748), Ron Peters (780-0963)
SMITH CORONA Richard Fichter (378-7023)
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GEMINI 10X Jim Stevenson (378-4093), Dick Caldwell (356-4248)

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ACTION Richard Fichter (378-7023), Jim Stevenson 378-4093
BASIC Dale Radtke (569-8795)
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Dean Miller (560-3533)
FILE MANAGER 800 Linda Winograd (860-0278), Scott Trump (323-7184)
SYNFILE Linda Winograd (860-0278)

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Washington Area Atari Computer Enthusiasts

Atari Users' Regional Association

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Treasurer.....	Richard Stoll.....	(301) 946-8435
Correspondence Sec..	Bruce McLendon.....	(301) 587-7890
Membership.....	William Pimble.....	(301) 341-9572
Disk Librarian.....	William Schadt.....	(301) 622-1547
Hardware Coordinator	Moe Sherman.....	(301) 593-1076

Meetings: 1st Thursday of every month, 7:00 pm, Wheaton Library, 11701 Georgia Avenue, Wheaton, Maryland. NOTE: July meeting will be held on Thursday, July 11.

New Members: Dues are $15/year (includes subscription to Current Notes). Mail check, payable to AURA, to Treasurer, AURA, P.O. Box 7761, Silver Spring, MD 20907.

Capital Pro Micro-Users Group

President.....	Bob Kelly.....	(301) 839-6397
VP-Finances.....	Reg Brown.....	(301) 340-7943
VP-Communications...	Bob Danson.....	(703) 780-0758
VP-Program Affairs..	Frank Jones.....	(301) 593-1056
Disk Library.....	Mike Abramovitz.....	(301) 983-2363
Sysop/RBBS.....	Frank Huband.....	(703) 276-8342

Meetings: Capital Pro Micro-Users meetings are held at the Public Library in Oxon Hill, Maryland. The Library is located near the Woodrow Wilson Bridge just off the Washington beltway. From Virginia via the Woodrow Wilson Bridge, stay on the beltway to Maryland exit #4 West (St. Barnabas Road). St. Barnabas Road merges with Oxon Hill Rd. (right turn at end of exit ramp); proceed 1/4 mile; Library is on your left. The meetings are held each month in the Author Room. The Library telephone number is 301-839-2400.

New Members: Dues are $15/year (includes a subscription to Current Notes) or $3/year (no subscription). Send check, payable to Reg Brown, to Reg Brown, 9325 Bent Ridge, Potomac, Maryland 20854.

National Capital Atari Users' Group

President.....	Frank Huband.....	(703) 527-4770
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Meetings. 3rd Tuesday of every month, 5:30-8:30, Room 543, National Science Foundation offices, 1800 G. Street NW, Washington, DC. The closest subway stop is Farragut West, on the Blue and Orange lines. Take the 18th Street exit, and walk south (against the flow of traffic) down 18th Street for three blocks to G street. The building, on the corner of 18th and G, can be identified by a sign for the Madison National Bank on the corner. Parking is available in the building for a fee. The front entrance is on the west side of 18th street, between F and G.

New Members: Dues are $15/year (includes subscription to Current Notes). Send checks, payable to National Capital Atari Users Group, to Allen Lerman, 14905 Waterway Drive, Rockville, MD 20853.

Northern Virginia Atari Users Group

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Education.....	Diana Burdt.....	(703) 425-5073
Disk Librarian.....	M. Evan Brooks.....	(703) 354-4482

Meetings: 2nd Sunday of each month, 5:30-8:30, in the large Auditorium at WASHINGTON GAS LIGHT, 6801 Industrial Road, Springfield, VA. From Northwest: take beltway (495) to east on Braddock (620) to south on Backlick (617). From Northeast: Shirley Highway (395) to West on Edsall Road (648) to south on Backlick. Take a left at the light by Industrial Road. Washington Gas Light is the second building on the right. Informal gathering and demos 5:30-7:00, Business meeting 7:00-7:15, Program 7:30-8:30.

New Members: Dues are $15/year (includes subscription to Current Notes). Send checks, payable to NOVATARI, to Curtis Sandler, 7213 Idylwood Ct., Falls Church, VA 22043.

Woodbridge Atari Computer Users Group

President.....	Jack Holtzhauer.....	(703) 670-6475
First VP.....	Dave Marrandette.....	(703) 670-7675
VP-Education.....	Tim Mitchell.....	(703) 221-7722
VP-Liaison.....	Cecil Alton.....	(703) 670-4842
Secretary.....	Mike Stringer.....	(703) 786-8755
Treasurer.....	Curt Pieritz.....	(703) 494-3704
Librarian.....	Arnie Turk.....	(703) 670-2547

Meetings: Monthly, 7-10PM, usually on third Tuesday of the month, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Exact dates: JUL 16, AUG 20, SEP 24 (4th TUE), OCT 15, NOV 26 (4th TUE), DEC 17, JAN 21, FEB 18, MAR 17 (3rd MON), APR 15, MAY 20, JUN 17. Entering Woodbridge from either North or South on Rt #1, proceed to the intersection of Rt #1 and Opitz Blvd. (adjacent to Woodbridge Lincoln-Mercury). Turn west on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

New Members: Dues are $10/year plus $1 monthly dues (includes subscription to Current Notes for members in good standing). Send checks, payable to WACUG, to Mike Stringer, 709 Rutherford Dr., Fredericksburg, VA 22401.

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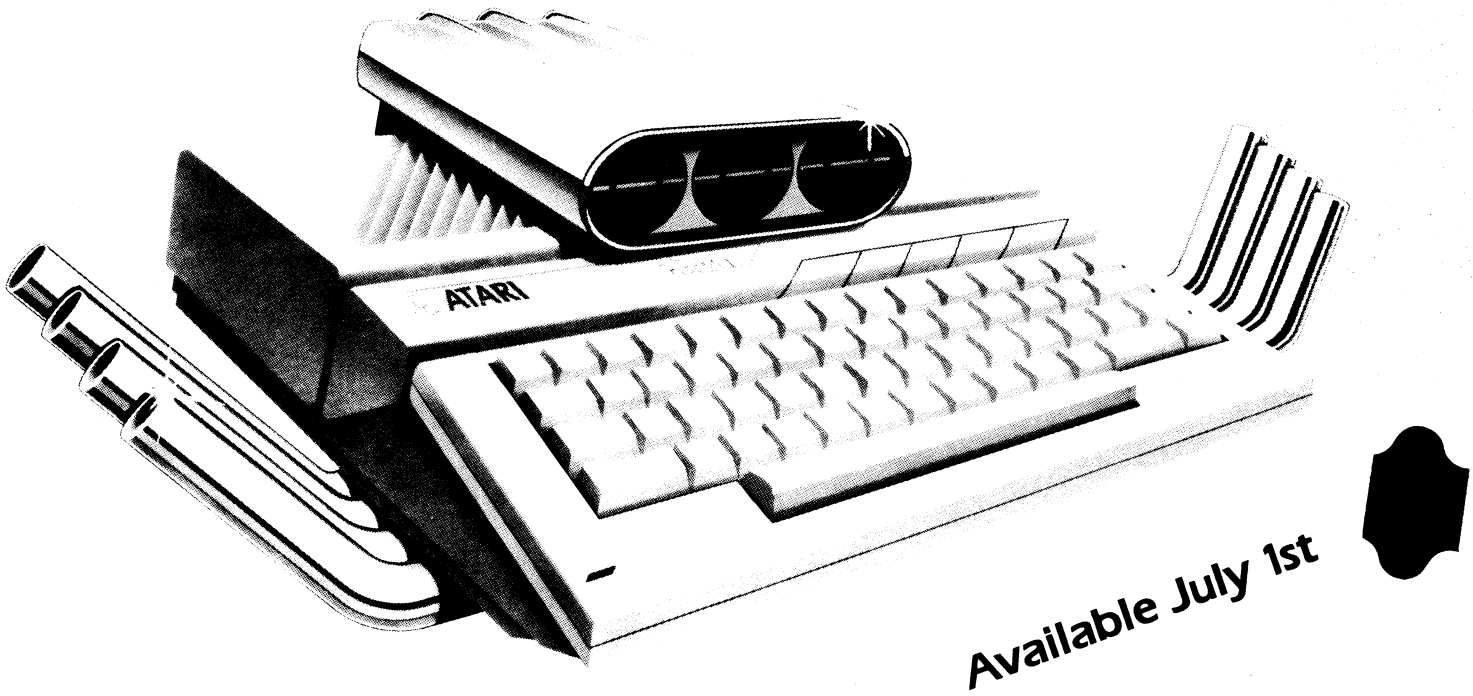

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